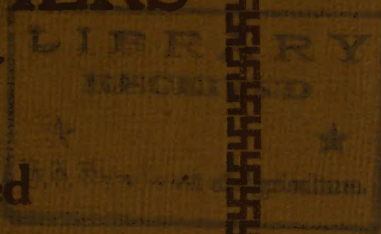


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BROWN BROTHERS COMPANY

Nurserymen, Limited



General Nursery Catalogue

Can.

BROWN'S NURSERIES, ONT.
COUNTY OF WELLAND

**General Catalogue of Fruit
and Ornamental Trees
Shrubs, Roses
Paeonies**



**HARDY BORDER PLANTS
BULBS, ETC.**

Grown and for sale by
**BROWN BROTHERS COMPANY,
Nurserymen, Limited,
BROWN'S NURSERIES, ONTARIO.**

PREFACE

In again presenting our revised General Catalogue, we desire simply to assure our agents and customers that in future the same careful business policy will be continued that has in many years past enabled us to increase from the smallest of plantings to the largest area of land under nursery cultivation in the country, and from a few agents, to the largest force of salesmen representing any nursery house in the country. Our customers can be found throughout the province of Canada and many foreign countries.

A MATTER OF HISTORY

We began in a small way and have gradually worked our business up to its present proportions. We personally oversee our business in all its details. Our success is largely based upon the delivery of reliable stock, for in these days when irresponsible so-called nurserymen are swindling people with their cry of "low prices" and "best stock" thoughtful buyers look before they leap and purchase only from a house that takes the utmost pains in filling every order, however small. For many years we did business under the firm name of "Brown Brothers," but are now incorporated under the laws of Ontario as "BROWN BROTHERS COMPANY, NURSERYMEN, Limited," with a paid up capital of \$75,000.

Our offices and nurseries, hundred of acres in extent, are located at Browns Nurseries, P.O., Welland Co., Ont., 12 miles from Niagara Falls. This is in the beautiful Niagara District. We are on a branch of the T.H.& B.R.R., three miles from Fenwick, on the main line.

Offices and Nurseries

Our nurseries stand second to none. We grow a complete assortment of all kinds of nursery stock. Our location is the best in Canada, being high and dry with soil ranging from light sand to clay. The climate and soil are peculiarly adapted for this business, and these favorable natural features, combined with careful propagation and cultivation have given our stock its great reputation. Our stock has a solid, firm texture of wood with abundant fibrous roots.

The men in our nurseries are careful and experienced propagators and cultivators. We personally oversee all our plantings, and watch with zealous eye every variety, so that nothing unfit for sale shall be allowed to be put on the market.

We extend to all a hearty invitation to visit our nurseries and grounds. Six days in the week we are ready to welcome our friends and visitors.

Our facilities for handling, packing, storing and shipping promptly are unequalled. Our large frost proof cellars, with double walls and packing houses attached, are the most complete in Canada, making it possible for us to store all of our stock under cover, without exposure to wind or sun. Our large greenhouses, comprising 50,000 feet of glass, are up-to-date in construction, heating and ventilation, and in fact, are first-class

Cellars, Fumigating Houses and Greenhouses

in every particular. These are used for Propagating Roses, Clematis, Grape Vines, and all tender and rare plants.

While we have never found San Jose scale or any other dangerous insects or plant diseases in our nurseries, yet we thoroughly fumigate all stock before shipment, having large houses erected entirely for this purpose.

We believe our prices compare favorably with those of other reliable firms, and many times our large stock and complete equipments make it possible to quote lower rates than can be had elsewhere. It is of the utmost importance to buyers to know that the stock they are getting is true to name, properly known, cultivated, pruned and packed carefully. It being impossible to know on receipt of stock whether all of these essential requirements have been met or not, it is therefore, important that you should know the reputation of the house you patronize. Low-price stock often proves the dearest in the end.

Prices Of fruits, ornamentals and flowers, includes everything of recognized value. Every year many new varieties are brought to our notice, but before putting them before the public they are thoroughly tested, and their good qualities positively determined.

Our Assortment We guarantee our stock to be first-class and to be delivered in good condition. In accordance with the prevailing custom of reliable nurserymen and seedmen, it is understood, that, while we use every precaution to have our stock true to name, thus rendering it almost impossible to make a mistake, yet should any stock prove untrue, it is agreed between purchaser and ourselves that our guarantee of genuineness shall in no case make us liable for an amount larger than the original purchase price of said stock.

Guaranteeing Stock Our packing cellars and grounds being near the tracks of the T.H.& B. railroad, enable us to load and ship our stock with more dispatch than if we were compelled to send it through the regular freight houses. At the proper season we dig only the first grade stock at our nurseries and bring it to the "packing cellars," where after being carefully examined again and the poor stock, if any, burned up, it is arranged in our enormous storage cellars and packing sheds. The stock for each customer is selected and tied in a bundle; a tag bearing his name and residence attached, and the bundle, with others for the same locality, packed carefully in a box, with plenty of damp moss and straw to protect the roots. The box is then plainly marked and shipped direct from the grounds.

Our Method of Packing and Shipping Stock We deliver the stock in good condition on the premises of each customer. The deliveryman is usually a reliable local man or firm, who is well known and respected in the locality and whose name in many instances is a guarantee of good faith and honest dealing.

Manner of Delivering Stock Thanking our salesmen and patrons again for past favors, and feeling confident of our ability to please them in the future, we beg to remain,

Very truly,

BROWN BROTHERS COMPANY, NURSERYMEN, (Limited.)

Our Guarantee Our nursery stock is warranted true to name. Should any stock not prove true to name, we will either refund the purchase money of same, or replace the stock with stock true to name, free, but are not liable for further damages, and while we are exercising great care to prevent mixtures, the above is to be a condition on which all our stock is delivered. All orders are to be without liability to us should injury or misfortune befall the stock from hail, frost, fire or any other cause beyond our control.

NEWSPAPER COMMENTS

From "The Globe", Toronto, Saturday, October 22, 1908

BROWN BROTHERS' BIG NURSERIES

Where Located—Their Area, Variety and Methods of Cultivation—Notes by the Way

By EDMUND L. YEIGH

The location was not selected as a site for a nursery by the Messrs. Brown for any other than the most prosaic reasons. Be it known that to successfully grow perfect nursery stock, very peculiar conditions are indispensable. The soil must be rich, arable, naturally well drained, and climatic conditions favorable. After long search everywhere, this location in Pelham Township, and partly in Welland and partly in Lincoln County, was chosen as filling all these demands. And one has only to see the vigorous forest growth, including Walnut, Butternut and Chestnut trees, all laden with nuts, and the magnificent blocks of fruit trees in the nurseries, to prove the wisdom of the choice. The firm would doubtless have preferred a site nearer a railway station, for Port Robinson, on the Welland branch on the Grand Trunk, was seven miles away, and this meant great cost in receiving or shipping goods. Now everything is made right by the incoming of the T.H. & B. for, although the main line is three miles away, yet the importance of the nursery trade is such as to warrant a siding right into the blocks of trees, and nothing is left to be desired.

Before we go through this labyrinth of three or four hundred acres of fruit, ornamental and shrubbery stock, we will look into the cosy and convenient offices. A post office has been opened called "Brown's Nurseries" and it is important to remember this in case of correspondence. An acetylene gas plant gives perfect illumination; a long distance (and shorter) telephone puts the occupants in touch with the wide world, and one wonders how correspondence concerning the Dominion is conducted without a single shorthand writer being employed. This is not because the firm is not up-to-date, but the contrary. Here the graphophone is in evidence, not as a toy, but as an invaluable adjunct.

And now let us turn to some facts which touch the interest of every farmer or fruit grower in Canada; buyers cannot be too careful of whom they purchase nursery stock. There may be, and there are, honest jobbers in trees. Last spring many growers of American stock were obliged, by reason of the stringent measures adopted by the government to prevent the importation of the San Jose Scale from infested nurseries, to become jobbers to a certain extent to fill orders. But this not only inured to the advantage of Canadian planters, but nurserymen as well. But, after all, one prefers to buy direct from the original growers of trees, for this gives an additional assurance of mutual satisfaction.

Passing from the office necessitated a ramble through the endless rows of green-houses, filled with the choicest flowers and plants. We have now reached the broad acres of land on which was standing a miniature forest growth of apple, plum, cherry and peach trees. One block of 25,000 plum trees attracted special attention for their vigorous growth and symmetrical form. On inquiry it was ascertained that these are the "Abundance," a contribution from Japan, the name being quite appropriate, for it is a prolific and heavy bearer.

While on the subject of "tree agents," as they are sometimes contemptuously referred to, let me say that no employment is more honorable if honorably done, and for an honorable firm. I paid a second visit to the nurseries. And, how the whole surroundings had changed ! The serried ranks of fruit trees, shrubs, vines, etc., had been carefully uprooted, and now filled the packing cellars with car loads ready for shipment to British Columbia, Cape Breton and all intervening points. One scarcely knew which most to admire—the beautiful, healthful stock, or the perfect system to which packing is reduced at Brown Brothers.

Surely it is not necessary to say more to prove the bona fides of this big Canadian industry. Its importance as a factor in solving the query of our future orchards and vineyards cannot be over-estimated, for great as is our present fruit crop, the industry is only in its infancy. For flavor and shipping qualities, Canadian apples stand unrivaled, and growers need only to exercise care in selection, culture and marketing to secure the highest price in foreign markets.

I cannot conclude without adding a word as to the open-handed hospitality which characterizes the firm. The latch string is always out to visitors, and one never doubts the genuineness of the welcome extended.

"Commercial," Winnipeg, December 10th, 1898

The Commercial has received a copy of the handsome Catalogue of Brown Bros. Co., nurserymen, along with which comes a beautiful colored plate which is called the Manitoba collection of small fruits. These are fruits selected specially for their hardiness. It is an evidence of the increased attention given to fruit growing and tree planting in Manitoba, that special efforts are being made by the leading nurseries to produce stock for this country.

LANDSCAPE ARCHITECTURE

"God Almighty first planted a Garden, and indeed it is the Purest of Human pleasures. It is the Greatest Refreshment to the Spirits of man ; without which Buildings and Palaces are but Grosse Handyworks ; and a man shall ever see that when Ages grow to Civility and Elegance, Men come to Build Stately sooner than to Garden Finely ; As if Gardening were the Greater Perfection."—*Bacon*.

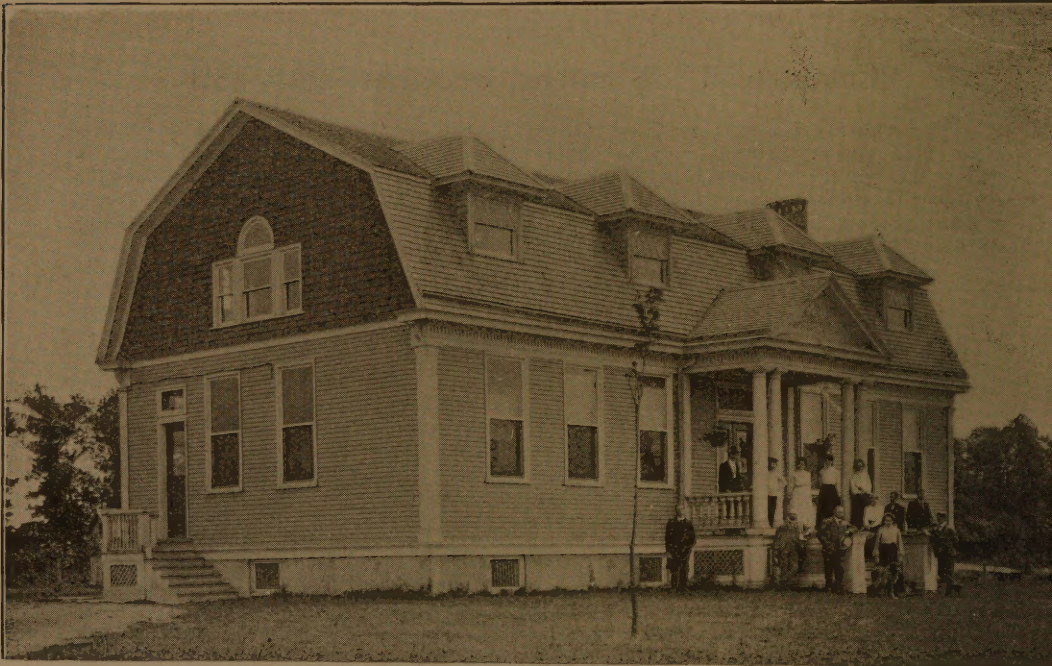
We are making a specialty of laying out public and private grounds. We not only work upon new places, but also re-arrange old ones, and frequently the improvement is almost as great in such cases as where grounds are entirely new. We require a rough sketch from which our landscape gardener can make his drawings. We then submit these drawings for approval, together with complete key, showing exact varieties to be employed, as well as their arrangement in beds, groups, etc. We lay out the levels, drives, walks, and do all the work of grading, seeding lawn and planting the stock where the extent of the work will warrant. Where grounds are not extensive, hardly permitting the sending of an expert to attend to the planting, we can still get up choice designs at a moderate outlay, enabling owners to plant intelligently and satisfactorily.

In all cases we furnish complete drawings on parchment which can be preserved and examined from time to time in order to ascertain the correct names of varieties, etc. Many of our customers speak highly of this feature as interesting and instructive to the family. We solicit this business and feel satisfied that we can please all who appreciate that harmony of effect and general utility which can be produced only by calling to aid professional skill.

From "The Canadian Horticulturist," Sept., 1904

ONE OF CANADA'S LEADING NURSERIES

There are some half dozen nurseries in Canada, which are noted owing to the immense volume of their business. One of these is the nurseries of Brown Brothers Company, in Welland county, whose local postoffice is named after the firm, being called Brown's Nurseries. The amount of mail handled through this postoffice,



The Business Corner of the Brown Bros. Company Nurseries

The correspondence and office work of this firm, described on this page, is so great it was recently found necessary to erect these handsome offices. (From a photograph taken specially for *The Horticulturist*)

may well be taken as some indication of the extensive business done by this firm. It is the largest rural postoffice in Canada, and stands forth in the Lincoln and Niagara districts for the amount of mail matter handled annually. This gives some idea of the business done by correspondence.

An editorial representative of *The Horticulturist*, who visited the nurseries recently, was much impressed with what he saw. The handsome residence of Mr.

Edward C. Morris, president of the company, and Mr. David Z. Morris, secretary-treasurer, are both located on the home nursery, so that the Messrs. Morris are in touch with all the details of their immense business and look after it exclusively. The extensive and well equipped offices are also situated on the nurseries. This building is 60 x 30 feet, two stories high, the interior being finished in hard wood. It is well lighted from all sides. As the company has not yet reached its limit, everything in the office is laid out for the future development, which its marked success in recent years leads it to expect.

"We packed three times as much stock in 1904 as we did in 1900," said Mr. Morris. "Some 14 years ago," continued Mr. Morris, "we started in the nursery business here on a comparatively small scale, and today there is no firm in Canada shipping more nursery stock in a year."

One advantage of having the main office at the central nurseries lies in the fact that all mail orders can be given prompt and careful attention, and the true condition of the stock available for sale can be readily ascertained. Orders by long distance telephone are also frequently received. So many hands are employed it has been found necessary to build two boarding houses on the home nursery, one for those engaged in the office and the other for nursery hands. Both are large, commodious and fitted with all modern conveniences. Surrounding the offices is an acre and a half of fine lawn, on which shrubs and ornamental trees have been planted. This lawn is to be increased to four acres in the near future, and made a beautiful park. When finished it will certainly present an imposing appearance.

How the Stock is Wintered

Of several large buildings, the finest of all is the new storage cellar. In the early years of the company's existence a small storage cellar, 12 x 30 feet, sufficed to winter over the stock. In a few years a larger one, 40 x 112 feet was erected. By 1900 this also fell short of the company's requirements, and a large brick, frost-proof storage cellar, 100 x 160 feet was built, in which to handle the different kinds of larger nursery stock. After being shown through this fine building and noting the great precautions that are taken to insure the preservation of the stock in the very best condition, the representative of *The Horticulturist* was not surprised to hear Mr. Morris remark, "after giving it a thorough trial, we believe we have the best storage building on this continent."

The structure seems to be perfect in every detail. It is absolutely frost-proof, and the ventilation is such that the air can be kept clean and pure at all times. A driveway runs through the building, and the entrances are provided with double doors which may be bolted and made air-tight if necessary. The temperature can be held at any point desired, and its control, as well as that of the atmospheric condition within the wall is such that trees can be kept there in a most healthy and thrifty state for many months when necessary. This was shown conclusively last year by an

Interesting Experiment

with some nursery stock which was left over. Trees were kept until July, and when examined were found to be in excellent condition for planting out. As a further

safeguard against loss of stock, the building is supplied with an efficient water system. If on examination, the stock shows any signs of becoming dry, it is an easy matter to water it thoroughly and quickly. "Direct sunlight," remarked Mr. Morris, "has an ill effect on nursery stock. This, however, is amply guarded against in this building. All the skylights face the north, and are covered with two thicknesses of glass, the outer one being extra heavy ribbed green skylight glass to soften the light."



**Half Mile Roadway at Nurseries Lined on Each Side by a Row of
Sour Cherry Trees**

The small nursery stock, and all imported lines such as seedlings, evergreens, shrubs, etc., are stored in the old building, which is also frost-proof. This building holds about 1,000,000 small stock, while the new one will hold some 500,000 large trees in addition to which there is room in each building for packing. All packing is done under cover, so that the young trees are not exposed to sun and wind. This modern method has superseded the old one of heeling in outside, and digging as needed, leaving the trees for hours exposed to the sun and wind before the packers get them into the boxes. With the present conveniences and accommodations packing can be commenced in late winter, and shipments made as soon as spring opens, thus giving the purchaser the advantage of an early delivery.

Ornamental Stock a Specialty

Special attention is given to ornamental stock, trees, shrubs, roses, climbing vines, etc., and the laying out of ornamental grounds is a special feature of the business of the Brown Brothers Company. The home farm is almost entirely devoted to ornamental lines, and to aid in securing the best roses, clematis, rubber plants, palms, hardy shrubs, etc., eight greenhouses have been constructed and expert propagators put in charge. The advantage of growing roses in this way is that when grown on their own roots they will not sucker or send up a shoot producing natural, uncouth flowers, and the purchaser is sure of the desired variety. Last year the output was 20,000 clematis and 75,000 roses, besides many thousands of shrubs and vines. "Our undivided attention," said Mr. Morris, "is given to growing and selling nursery stock, and our aim is to handle only the best that can be grown. We have a force of canvassers soliciting orders that will vary from 1,200 to 1,500 men working in Canada only."

A row of Montmorency cherry trees, about 350 in all, on either side of a driveway a half mile long, running through the middle of the home farm makes a beautiful sight. This roadway is further beautified by a pyramid Arbor Vitae hedge inside the row of trees.



A Building Which Holds 500,000 Trees

The storage cellar erected in 1903 by the Brown Bros. Company, Nurserymen, Limited, which is probably the finest of the kind in Canada, is shown here.

(From a photograph taken specially for *The Horticulturist*.)

Extensive Planting of Fruit Trees

The *Horticulturist* representative was driven by Mr. Morris to their various planting of nursery stock, and was surprised to see how extensive they are. On one road the planting extended along both sides for a very long distance, and on asking Mr. Morris as to what quantities were set out in these fields, he replied that over 1,200,000 young fruit trees were planted there, and added that on the next road west, and the one still beyond that, where fields containing hundreds of thousands of other young trees ready for the market.

With a total area of over 500 acres devoted exclusively to the growing of nursery stock, every line of nursery product, from the currant bush to the finest of ornamentals is grown. This acreage comprises the home farm of 100 acres, and some eight other farms of different sizes, which are rented for a term of years, thus giving new land for each successive planting.

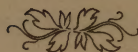
It requires at least four years to clear a block of nursery stock. The first year is spent in preparing the soil and adding the necessary fertilizers. "We spend hundreds—yes thousands—of dollars annually," said Mr. Morris, "on ordinary stable manure. One remarkably good feature about the soil of this district is that it produces a great abundance of fibrous roots. These, of course, are very essential as they provide the true life-giving power to the tree. Besides there is a great variety in the soil of this section within a very small radius, so that various kinds of stock can be planted in the soil best suited for their production."

Shipping Facilities

Like other successful tillers of the soil, Mr. Morris believes in thorough cultivation. The cultivators are started early in the spring as soon as the land is dry enough, and an effort is made to get over the plantings regularly once a week until August. In that month cultivation is stopped, so that too late growth may not be encouraged, as the new soft growth is easily injured by frost. About \$20,000 growth of seed potatoes are also handled each year. Although scale pests have never been detected in this district, all nursery stock is thoroughly fumigated according to law, before leaving the place.

For shipping purposes a private siding runs from the T.H.& B. railway and makes direct connection with the Michigan Central at Welland and the C.P.R. G.T.R. at Hamilton. The facilities for shipping will be even better in the near future as now there are two electric lines projected through the neighborhood.

Visitors in the Niagara district will be repaid for any effort made to visit these nurseries, as they are well worth seeing. Our representative, after viewing all the plant and inspecting all the numerous buildings, could not help but express great surprise at their extent and completeness. This firm has certainly built up a very large business in a comparatively short time.



THE PRESENT DAY QUESTION

HOW to BEAUTIFY

OUR HOMES AT

LITTLE COST

Few people realize what an outlay of \$5.00, \$10.00, \$50.00 or more means to The Home. Let us tell you. You will pass a beautiful house where no ornamental planting has been undertaken, and remark, "what a fine house," when had the owner spent a moderate sum in planting trees and shrubs about the borders and in the rear yard, your remark would have been: "Oh! what a beautiful home." Tastily planted yards, both front and rear, create a Home. A beautiful picture needs a suitable frame and as the frame adds to the picture so will a well planted lawn and yard add to your house.

If you wish to transform your grounds and make them attractive and home-like, we can aid you to do this, whether your land is a city lot, 25 x 100 ft., or large estate of 1 acre or 100 acres.

WE CAN DO THIS AT A MINIMUM COST

The lot plans herewith will give you a slight idea of what can be done

We Select the Varieties of Shrubs and Trees

Best Suited to Your Locality

We are the largest growers of Ornamental Trees, Shrubs, Roses, Vines and Evergreens in Canada. We have an experienced man constantly employed for designing and laying out private grounds, city lots, public parks, squares and cemeteries. As we grow our own Nursery Stock, we are therefore in better position than all others in Canada to undertake this work.

All plants sold you we guarantee A No. 1, and we will deliver same at your nearest express or freight office, charges paid.

You Pay Us After Examining Stock

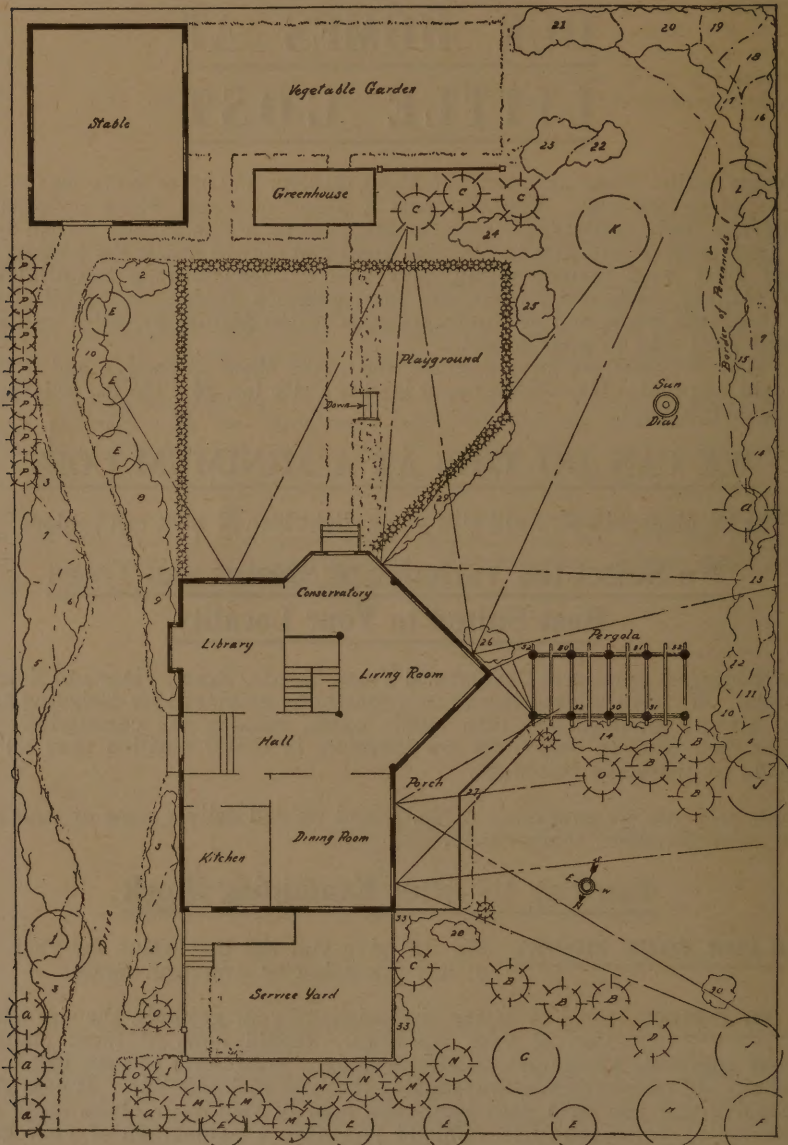
VALUE FOR YOUR MONEY We will give you the best value for your money of any Canadian or American house.

HOW TO ORDER Send to us the dimensions of your grounds, the size and location of your buildings. Should none of these plans meet with your approval, we can get up special designs to conform to your ideas. State whether any old trees or shrubs are standing that you wish to retain. If your grounds are extensive and you wish your landscape man to visit your place, same can be arranged for by correspondence. Should you have a **photograph** of your grounds it would aid us in preparing plans.

These plans show how shrubs, trees and perennial borders should be grouped.

Keys to plans furnished on application.

The lines drawn from the windows show the view points.





Interior of Our Large Packing Cellars



“BEFORE”



“AFTERWARDS”

An illustration of what a small expenditure will do toward transforming the appearance of a place.

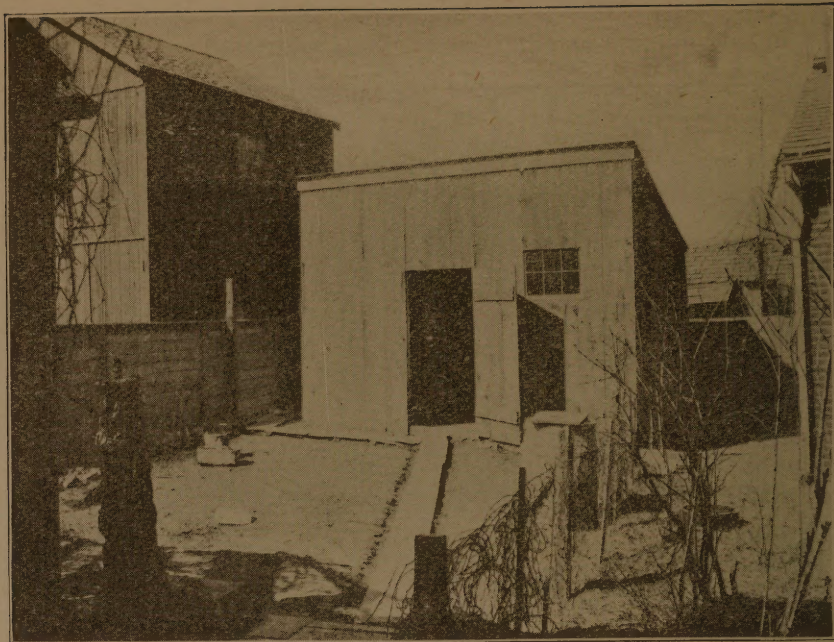


“BEFORE”



“AFTERWARDS”

An illustration of what a small expenditure will do towards transforming the appearance of a place.



“BEFORE”



“AFTERWARDS”



AN ARTISTIC ARBOR

NOTICE TO CUSTOMERS

1. Orders should be sent in as early as possible, that there may be plenty of time for shipping long distances when necessary.

2. Buyers ordering by letter, should write out their orders plainly, on a separate list, and not on the body of the letter. It will prevent mistakes in the hurry of the packing season.

3. Give plain and explicit shipping directions. When none are given we forward according to our best judgment; but in no case do we assume any responsibility after the delivery of the stock in good condition to the forwarder.

4. All orders from unknown correspondents must be accompanied with the cash or satisfactory references.

5. If the varieties of fruit ordered cannot be supplied, others equally as good, and ripening about the same season, will be substituted, unless ordered to the contrary.

6. We recommend that purchasers leave the selection of varieties with us, as far as possible merely stating the proportion of summer, fall and winter fruit wanted, as our experience enables us to select such sorts as are adapted to the locality. We will cheerfully give our personal attention to all such orders, and our customers can depend on getting, not only the best varieties, but those that are best adapted to the location.

7. Immediate notice should be given to us of any error in filling out an order, so that we may at once rectify the mistake, or give a satisfactory explanation.

INTRODUCTORY

In this new edition of our catalogue, we have omitted all illustrations for the reason that one cannot form much of an idea of a fruit or flower from a picture unless it be in colors. Even then, an actual reproduction will generally be thought to be overdrawn. It is far more important that all possible information is given as to the varieties best adapted to each district. This information we have endeavored to give. Throughout the catalogue we have marked with a (*) varieties that are adapted to Canada. Would also call your special attention to the pages showing varieties of fruit best adapted to each particular district.

HINTS TO PLANTERS

The life and well-being of a tree depends very much upon the care and treatment it receives after it leaves the hands of the nurserymen, and as a large proportion of the trees that are lost fail for the want of proper treatment, we desire to offer a few hints upon the subject of transplanting, pruning, etc.

Preparing the Soil.—For fruit trees the soil must be well drained, as trees will not live or thrive on a soil saturated with stagnant moisture. Prepare the soil for trees as well or better than for wheat, corn or potatoes, plow deep, harrow thoroughly.

Planting the Trees.—Dig large holes so that the roots will rest naturally. Do not bend or cramp them. Cut off bruised or broken roots, then dip them into thin mud and plant immediately. Never let the roots become dry before planting. Plant the tree as deep as it stood in the nursery row. Fill in the hole with fine, moist rich dirt, free from straw or trash, packing firmly round the roots. Tread down firmly with the foot, except the last few inches at the top which should be fine loose soil.

Watering.—Water only in case the soil is dust dry. Pour three or four gallons of water into the hole after it is two-thirds full, allowing it to disappear. Then finish filling the hole. Remove labels or the wires will injure the growing tree.

Pruning.—Prune at the time of planting. For apple, pear, etc., cut out all weak, broken, or bruised limbs, and any others that spoil the balance of the head. Then shorten the remaining limbs to three or four buds. If there is a main leader near the centre, cut it back half. For grape vines and small fruits, trim roots to a reasonable length and cut off most of the new top growth, leaving only two or three buds to each cane. For peach trees cut all limbs back to a short stub, leaving only one bud. Cut back the main trunk at least one-third. Do not prune cherry trees until the second year. Cherries require less pruning than any other fruit. Head all trees low. They are easier to spray and their fruit is more easily harvested.

Cultivation.—Cultivate the first several years to promote a good growth. Such cultivated crops as potatoes and beans are sometimes planted between the rows.

If the land needs fertility drill and cultivate cow peas, whose roots add nitrogen (tree-food) to the soil. When the orchard is older plow in the spring, cultivate well until sometime in July, and then sow cover crops.

Pruning.—Pruning after the first year should be varied according to the purpose of the planter and the variety of the tree. It should be trimmed as early as possible up to the height it is intended the future head should be, and the cutting off of large limbs may not in future be necessary. The removal of large branches should be avoided in all cases, whenever it is possible to do so, as decay is liable to commence at the point of separation and extend into the trunk; and whenever it is done, the wound should be carefully pared smooth, and a coating of paint or grafting wax applied to protect it from the action of the weather. After the removal of lower branches until the head has reached the desired height, the only pruning needed is to remove such branches as are crossing or interfering with each other; and to keep the head in symmetrical shape and well open to the sun and air. Trees should receive proper shape by judicious pruning and attention early in the spring of each year while they are young, and very little pruning will be needed afterward. When trees are to be pruned and trained for specific purposes and in a special manner, the orchardist will find full directions in the standard works on horticulture, which may be read with great benefit and followed with success, but are beyond the scope of an ordinary catalogue.

Grape Vines.—Require a dry, mellow, well-drained soil, deeply worked and well enriched, with a warm, sunny exposure. In planting give the roots plenty of room, and settle the soil firmly about them. A strong vine may be allowed to grow the first season without pruning; in November or December following the growth should be cut back to three or four buds; the next season allow but two buds to grow, which should make canes seven to ten feet long and be cut back four to five feet, ready for fastening to the trellis. For the subsequent pruning of vines as well as trees, planters would do well to consult some practical work on the subject.

Berries.—Should have a strong soil and be kept under constant cultivation. Mulching is of especial value. Raspberries and Blackberries should have old wood cut out each year, and new canes pinched off when three feet high. Strawberries should be mulched late in the fall; uncover the crown early in spring; remove mulch after fruiting and spade in light dressing of manure. If set for fruit, keep the runners cut off.

Currants and Gooseberries.—Need heavy mulching and pruning, so that new wood will have room to grow.

Roses.—Should have a deep, rich, well-drained soil, and should be severely pruned every spring before the buds start, cutting back all the last growth to three or four buds, except Climbing Roses, which may be first allowed to partly cover the space desired. Old decayed branches should never remain. Every Autumn compost should be placed around the stems of the plants, and spaded into the ground in the following spring.

Treatment of Trees that have been Frozen in the Packages, or Received during Frosty Weather, or after long Exposure.—Place the packages, unopened, in a cellar or some such place, cool, but free from frost, until perfectly thawed, when they can

be unpacked and either planted or placed in a trench until convenient to plant. Treated thus they will not be injured by the freezing. If dried from long exposure, bury entirely in the ground, or place in water from 12 to 14 hours. When ready to plant prune more closely.

Fall Planting.—When planted in the fall, all trees should be banked up at least one foot high until spring. This overcomes the tendency of the trees to heave out, protects them from mice and prevents the roots from freezing before they have taken hold of the soil. In planting roses, shrubs, vines and other delicate stock in the fall, **the tops should be nearly or quite buried with mellow earth during the first winter.** The surplus earth should be removed in the spring.

Never prune trees when planted in the Fall, as they would be almost sure to either black heart or winter-kill.

WINTERING NURSERY STOCK PROCURED IN THE FALL

In sections where the winters are very severe, it is not advisable to set out young trees and plants in the fall, but the practice of procuring them in the fall and planting them in the spring is becoming more and more popular as experience has demonstrated its advantages. In the fall nurserymen are not hurried with their own planting; the season for shipping is comparatively long, and the weather not nearly so changeable as in the spring. Railways are not so much hurried and there is much less chance for injurious delays than in the spring. It being practicable to plant trees so procured as soon as the frost is out, they become thoroughly established the first season.

There is a popular impression that trees dug in the fall and heeled in over winter are worthless. If the heeling is well done there could not be a greater mistake. Peach and some other young trees, if left standing during the first winter are frequently killed or injured by frost, while if dug in the fall and treated as described on following page, they come through bright and uninjured.

To insure success, select a dry spot where no water will stand during the winter having no grass near to invite mice. Dig a trench deep enough to admit one layer of roots, and sloping enough to admit the trees to lay at an angle of not more than 30 degrees with the ground. Having placed one layer of roots in this trench; cover them with mellow earth extending well upon the bodies and see that this is firmly packed. Then add another layer of trees overlapping the first, and continuing as at first until all are heeled in. As soon as this is done, cover the tops so well with evergreen boughs that they will be thoroughly protected from the winds. Roses and other small stock may be wholly covered with earth.

PLANTING SEASON

Planting season is NOT regulated by date or by the planter's season, but by the condition of stock when planted. If a tree is grown right, is dormant when received, and then properly planted and cared for, its successful growth is assured. Our trees are grown right; our method of planting insures dormant stock. We ship to Niagara District planters weeks after spring has opened here with entire success.

DISTANCES FOR PLANTING

Standard Apples.....	30 to 40 feet apart each way
Standard Pears and strong growing Cherries.....	20 " " "
Duke and Morello Cherries.....	16 to 18 " " "
Standard Plums, Apricots and Peaches.....	16 to 18 " " "
Dwarf Pears.....	10 to 12 " " "
Grapes.....	rows 9 to 12 feet apart 7 to 12 feet in rows
Currants and Gooseberries.....	3 to 4 feet apart each way
Raspberries and Blackberries.....	2 to 4 by 5 to 8 feet apart
Strawberries, for field culture.....	1 to 1 1-2 by 3 to 4 feet apart
Strawberries, for garden culture.....	1 to 2 feet apart

NUMBER OF TREES TO AN ACRE

2 feet by 2 feet.....	10,860
2 feet by 8 feet.....	2,472
3 feet by 1 foot.....	14,520
3 feet by 2 feet.....	7,260
3 feet by 3 feet.....	4,840
5 feet by 5 feet.....	1,742
6 feet by 6 feet.....	1,210
10 feet by 10 feet.....	435
15 feet by 15 feet.....	193
17 1-2 feet by 17 1-2 feet.....	142
18 feet by 18 feet.....	134
30 feet by 30 feet.....	48
35 feet by 35 feet.....	35
40 feet by 40 feet.....	27

Rule.—Multiply the distance between the rows by the distance the plants are apart in the rows and the product will be the number of square feet for each plant or hill; which, divided into the number of feet in an acre (43,560) will give the number of trees to an acre.

Varieties marked with (*) are recommended for planting in Canada. We give descriptions of other sorts which are oftentimes well known, but do not recommend them.

SPRAYING CALENDAR

PLANT	First Application	Second Application	Third Application	Fourth Application	Fifth Application	Sixth Application
APPLE. (Scab, codlin moth, bud moth.)	When buds are swelling, copper sulphate solution.	<i>Just before blossoms open, Bordeaux. For bud moth, Arsenites when leaf buds open.</i>	<i>When blossoms have fallen, Bordeaux and Arsenites.</i>	8-12 days later, Bordeaux.	10-14 days later, Bordeaux.	10-14 days later Bordeaux.
CHERRY. (Rot, aphid, slug.)	As buds are breaking, Bordeaux; when aphid appears, Kerosene emulsion.	When fruit has set, Bordeaux. If slugs appear, dust leaves with air-slacked lime. Hellebore.	10-14 days if rot appears, Bordeaux.	10-14 days later, Ammoniacal copper carbonate.		
CURRENT. (Mildew, worms.)	<i>At first sign of Worms, Arsenites.</i>	<i>10 days later, hellebore. If leaves mildew, Bordeaux.</i>	<i>If worms persist Hellebore.</i>			
GOOSEBERRY. (Mildew, worms.)	<i>When leaves expand, Bordeaux. For worms, as above.</i>	10-14 days later, Bordeaux For worms as above.	10-14 days later, Ammoniacal copper carbonate. For worms as above.	10-14 days later, repeat third.		
GRAPE. (Fungous diseases, Flea-beetle.)	In Spring, when buds swell, copper sulphate solution. Paris green for flea-beetle.	<i>When leaves are 1 1-2 inches in diameter, Bordeaux. Paris green for larvae of flea-beetle.</i>	<i>When flowers have fallen, Bordeaux. Paris green as before.</i>	10-14 days later, Bordeaux.	10-14 days later, if any disease appears, Bordeaux.	10-14 days, Ammoniacal copper carbonate. Make later applications of this if necessary.
PEACH, NECTARINE, APRICOT. (Rot, mildew.)	<i>Before buds swell, copper sulphate solution.</i>	Before flowers open Bordeaux.	When fruit has set. Bordeaux.	When fruit is nearly grown, Amomniacal copper carbonate.	5-10 days later, repeat fourth.	5-10 days later repeat fourth if necessary.
PEAR. (Leaf blight, scab, psylla, codlin moth.)	As buds are swelling, copper sulphate solution.	<i>Just before blossoms open, Bordeaux. Kerosene emulsion when leaves open, for psylla.</i>	<i>After blossoms have fallen, Bordeaux and Arsenites, Kerosene emulsion if necessary.</i>	8-10 days later, repeat third.	10-14 days later, Bordeaux. Kerosene emulsion applied forcibly for psylla.	10-14 days later, repeat if necessary.
PLUM. (Fungous diseases, curculio.)	<i>During first warm days of early spring, Bordeaux for black knot. When leaves are off in the fall, Kerosene emulsion for plum scale.</i>	<i>When buds are swelling, Bordeaux for black knot and other fungous diseases. During mid-winter, Kerosene emulsion for plum scale.</i>	<i>When blossoms have fallen, Bordeaux. Begin to jar trees for curculio. Before buds start in spring Kerosene emulsion for plum scale.</i>	10-14 days later. Bordeaux. Tar trees for curculio every 2-4 days. For San Jose scale, Kerosene emulsion when young appear in spring and summer.	10-20 days later, Bordeaux for black knot. Tar trees for curculio. When young plum scale insects first appear in summer, Kerosene emulsion.	10-20 days later, Bordeaux for black knot. Later applications may be necessary to prevent leaf spot and fruit rot, use Ammoniacal copper carbonate.
QUINCE. (Leaf and fruit spot.)	When blossom buds appear, Bordeaux.	When fruit has set, Bordeaux and Arsenites.	10-20 days later, Bordeaux.	10-20 days later, Bordeaux.	10-20 days later, Bordeaux.	
RASPBERRY. BLACKBERRY. DEWBERRY. (Anthracnose, rust.)	Before buds break, copper sulphate solution. Cut out badly diseased canes.	During summer, if rust appears on leaves, Bordeaux.	Repeat second if necessary.	(Orange or red rust is treated best by destroying entirely the affected plants.)		
ROSE. (Mildew, black spot, red spider, aphid.)	For mildew. Keep heating pipes painted with equal parts lime and sulphur mixed with water to form a thin paste.	For black spot. Spray plants once a week with Ammoniacal copper carbonate, using fine spray.	For red spider. Spray plants twice a week with Kerosene emulsion. Apply to under side of foliage.	For aphid. Spray affected parts with Kerosene emulsion when necessary.		(Kerosene emulsion must be used very dilute, as rose foliage is easily injured by it.)

The applications italicised are the most important.

INSECTICIDES

KEROSENE EMULSION

Kerosene (coal oil).....	2 gals.
Rain water.....	1 gal.
Soap.....	1-2 lb.

Dissolve soap in water by boiling ; take from fire, and, while hot, turn in kerosene and churn briskly for 5 minutes. To be diluted before use with 9 parts of water.
For bark lice and other sucking insects—

PARIS GREEN

Paris green.....	1 lb.
Lime (fresh).....	1 lb.
Water.....	200 gals.

For dry application—1 lb Paris green with 50 lbs flour, land plaster, slaked lime or any other perfectly dry powder.
For insects which eat foliage—

HELLEBORE

White hellebore.....	1 oz.
Water.....	2 gals.

Or to be dusted undiluted over attacked plants.

PYRETHRUM (or insect Powder)

Pyrethrum powder.....	1 oz.
Water.....	3 gals.

For dry application—Mix thoroughly 1 part by weight of Insect Powder with 4 of cheap flour, and keep in a close vessel for 24 hours before dusting over plants attacked.

WHALE-OIL SOAP

For scale-insects (young).....	1 lb. in 5 gals. water
For aphids.....	1 lb. in 8 gals. water
For San Jose scale (in winter).....	2 lbs. in 1 gal. water

TOBACCO AND SOAP WASH

For Plant Lice or Aphids

Soak in hot water for a few hours 10 lbs. of tobacco leaves (home grown will do) ; strain off and add 2 lbs of Whale-oil soap. Stir until all is dissolved, and dilute to 40 gals. Apply early and two or three times at short intervals.

This is the solution to use for destroying the Spruce Gall Louse.

The application should be made early in the spring—during May or the fore part of June, before the galls, in which the insects conceal themselves, are formed.

The only remedy for trees on which the gall has formed, is to cut off the affected parts.

ALKALINE WASH

For Borers

Soft soap, reduced to the consistency of thick paint, by the addition of a strong solution of washing soda in water. If applied with a brush during the morning of a warm day, this will dry in a few hours, and form a tenacious coating not easily dissolved by rain.

FUNGICIDES

DILUTED BORDEAUX MIXTURE

For Fungi on Fruit Trees

Copper sulphate.....	4 lbs.
Quick lime.....	4 lbs.
Paris green (for leaf-eating insects).....	4 ozs.
Water (1 barrel).....	40 gals.

Dissolve the copper sulphate (by suspending it in a wooden or earthen vessel containing 4 or 5 more gallons of water). Slake the lime in another vessel. If the lime, when slaked, is lumpy or granular, it should be strained through coarse sack-ing or a fine sieve. Pour the copper sulphate solution into a barrel, or it may be dissolved in this in the first place; half fill the barrel with water, add the slaked lime, fill the barrel with water and stir thoroughly. It is then ready for use.

Stock solutions of dissolved copper sulphate and of lime may be prepared and kept in separate covered barrels throughout the spraying season. The quantities of bluestone, lime and water should be carefully noted.

For Potato-Rot.—Use 6 lbs. copper sulphate instead of 4 lbs.

COPPER SULPHATE SOLUTION

Copper sulphate (bluestone).....	1 lb.
Water.....	25 gals.

As soon as dissolved it is ready for use. *For use before the buds open only.*

AMMONIACAL COPPER CARBONATE

Copper Carbonate.....	5 ozs.
Ammonia.....	2 qts.
Water (1 barrel).....	40 gals.

Dissolve the copper carbonate in the ammonia. The ammonia and concentrated solution should be kept in glass or stone jars, tightly corked. It is ready for use as soon as diluted with the 50 gals water. To be used when Bordeaux cannot be applied on account of staining the fruit.

FORMALIN, CORROSIVE SUBLIMATE

For potato scab soak the tubers either—

- I. For 2 hours in a solution of commercial Formalin (Formaldehyde) 8 oz. in 15 gals of water; or
- II. For 1 1-2 hours in a solution of corrosive sublimate, 2 oz in 16 gals of water.

When dry cut up for planting.

Formalin has the advantage of being neither poisonous nor corrosive, while corrosive sublimate is a fatal poison if taken internally. It also corrodes metals. The solution should therefore be made in wooden or glazed vessels. All treated seed should be planted, and any solution left over should be poured into a hole in the ground.

For Smut in Small Grains, soak the seed for 2 hours in the above solution of Formalin (I).

Black knot on plums and cherries should be cut out and burned as soon as discovered.

For apides or plant lice, use kerosene on all plants.

TREATMENT OF SAN JOSE SCALE

This is a subject of such importance that we consider it wise to go into it thoroughly.

In sections where the scale has been found, some have cut out the trees entirely.

After very carefully watching the methods of inspectors who have had in hand the work of reducing or eradicating this pest, we feel quite justified in advising proper spraying before the adoption of such severe measures.

If the scale has been known to exist in your neighborhood, do not fail to examine your trees as carefully through the summer as you would in the winter, and if you find any trees affected, apply Kerosene Emulsion. One application will probably be sufficient until after you have harvested your crop. This course will not only keep the enemy in check, but will also prevent the fruit from becoming affected.

We would follow this up with an application of Crude Petroleum in the late autumn, on apples, pears and plums, but for peaches and trees that are tender, hold to Kerosene Emulsion.

It is worthy of note that Kerosene Emulsion when applied in July or early August has the very beneficial effect described, while in some cases it has caused serious injury when applied in winter.

Two and one-half pounds Whale Oil Soap, one gallon Crude Petroleum, diluted with ten gallons water, is about the proper proportion for this solution.

Bear in mind, please, that a very different nozzle should be used for spraying trees for summer work from that employed at any other time of the year. A coarse nozzle will be found best for spraying trees in leaf, as the spray will then strike the bark.

To make this work complete, we would follow it up in winter, or spring, with an application of lime and sulphur.

It is possible one year's treatment may not entirely do away with the pest, but your efforts will certainly show pleasing results, and by continuing the same treatment a second year will, in the majority of cases, result in the complete extermination of the scale.

This method is certainly better than destroying your orchard.

Whenever using any emulsion, see to it that the solution is always well churned at frequent intervals, to prevent the ingredients from separating.

PLANT VARIETIES ADAPTED TO YOUR LOCALITY

In order to meet with success in fruit growing it is important that varieties be planted that are adapted to local conditions. The varieties we recommend below are those approved by the Dept. of Agriculture and leading authorities. Plant only what is known to be successfully grown in your section.

APPLES

(Fruits named in order of ripening)

Ontario Niagara District—Commercial varieties—Astrachan, Duchess, Gravenstein, Blenheim, Cranberry Pippin, Hubbardston, King, Greening, Bladwin, Spy, Delicious.

Domestic varieties—Early Harvest, Sweet Bough, Duchess, Gravenstein, Fameuse, Wagener, Yellow Belleflower, Spitzenburg, Talman, Delicious.

Bay of Quinte District—Commercial—Duchess, Gravenstein, Alexander, Wealthy, Fameuse, McIntosh, King, Greening, Baldwin, Delicious.

Domestic—Gravenstein, Fameuse, McIntosh, Grimes, Greening, Ontario, Talman, Delicious.

Burlington District—Commercial—Astrachan, Duchess, Wealthy, Ribston, King, Greening, Baldwin, Spy, Delicious.

Domestic—Astrachan, Sweet Bough, Gravenstein, Wagener, Delicious, Golden Russet.

Lake Simcoe District—Commercial—Duchess, Peerless, Alexander, Wolf River, Blenheim, Pewaukee, Stark, Delicious.

Domestic—Astrachan, St. Lawrence, Fameuse, McIntosh, King, Spy, Delicious.

Lake Huron District—Commercial—Astrachan, Duchess, Wealthy, Fameuse, McIntosh, Blenheim, Greening, Baldwin, Spy, Delicious, Golden Russet, Ben Davis.

Domestic—Transparent, Astrachan, Duchess, McIntosh, Grimes, Blenheim, King, Spy, Delicious, Golden Russet.

St. Lawrence District—Commercial—Duchess, Alexander, Wolf River, Scarlet Pippin, Fameuse, McIntosh, Baxter, Milwaukee, Golden Russet.

Domestic—Transparent, Scarlet Pippin, Fameuse, McIntosh, Golden Russet, Yellow Belleflower, Delicious.

Algoma District—Commercial and Domestic—Astrachan, Lowland Raspberry, Transparent, Duchess, Gideon, Longfield, Wealthy, Scott's Winter.

Quebec—Transparent, Lowland Raspberry, Duchess, St. Lawrence, Wealthy, Alexander, Wolf River, Fameuse, McIntosh, Milwaukee, Canada Red, Golden Russet.

New Brunswick—South of Woodstock and Shediac—Crimson Beauty, Astrachan, Transparent, Duchess, Dudley's Winter, Wealthy, Alexander, Wolf River, Fameuse, McIntosh, Ribston, Bishop Pippin, Canada Baldwin, Talman, Baxter, Pewaukee, Delicious.

North of Woodstock and Shediac—Crimson Beauty, Transparent, Duchess, Wealthy, Wolf River, Fameuse, Alexander, Scott's Winter, Canada Baldwin.

Prince Edward Island—Crimson Beauty, Transparent, Astrachan, Duchess, Wealthy, Alexander, Wolf River, Stark, Delicious.

Manitoba, Alberta and Saskatchewan—Duchess, Gideon, Hibernial, Lowland Raspberry, N. W. Greening, Patten's Greening, Peerless, Wealthy, Windsor Chief, Transparent.

CHERRY

Ontario, Niagara District—Gov. Wood, Napoleon, Bigarreau, Black Tartarian Dyehouse, Early Richmond, May Duke, Windsor, Morello.

Lake Simcoe District—Orel 24, Ostheim, Bessarabian, Dyehouse, Morello.

Algoma District—Richmond, Morello, Montmorency.

Bay of Quinte District—Early Richmond, Large Montmorency.

St. Lawrence District—Richmond, Montmorency, Orel 24, Morello.

Quebec—Early Richmond, Large Montmorency, Empress Eugenie, May Duke, Louis Philippe.

New Brunswick—Early Richmond.

Prince Edward Island—Morello.

PEACH

Ontario, Niagara District—Alexander, Greensboro, Triumph, Yellow St. John, Early Crawford, Fitzgerald, Champion, Niagara, Elberta, Smock.

Essex District—Alexander, Triumph, Yellow St. John, Early Crawford, Fitzgerald, New Prolific, Engle's Mammoth, Elberta, Golden Drop, Kalamazoo, Banner, Smock.

PEAR

Ontario, Niagara District—Wilder, Clapp's Favorite, Bartlett, Bosc, Howell, Duchess, Beurre Clairgeau, Anjou, Easter Beurre.

Burlington District—Clapp's, Bartlett, Dwf. Duchess, Anjou, Kieffer, Winter Nelis, Easter Beurre.

Bay of Quinte—Clapp's, Dempsey, Bosc, Clairgeau, Lawrence.

St. Lawrence District—Clapp's, Flemish Beauty, Ritson.

Quebec—Flemish Beauty.

New Brunswick and P.E.I.—Clapp's Favorite, Bartlett.

PLUM

Ontario, Niagara District—Commercial—Shiro, Red June, Burbank, Bradshaw, Chabot, Gueii, Coes, Quackenboss, Satsuma, Reine Claude, Imperial Gage.

Domestic—Abundance, Washington, Yellow Egg, Shropshire, Quackenboss, Satsuma, Reine Claude.

So. Ontario—Shiro, Red June, Abundance, Burbank, Bradshaw, Imperial Gage, Lombard, Italian Prune.

Burlington District—Commercial—European varieties, Shiro, Bradshaw, Imperial, Gage, Lombard, Yellow Egg, Glass, Reine Claude. Japan varieties—Red June, Abundance, Burbank, Chabot, Satsuma.

Georgian Bay and Lake Huron District—Red June, Ogon, Burbank, Bradshaw, Imperial Gage, Gueii, Shipper's Pride, Quackenboss, Yellow Egg, Monarch, Grand Duke, Satsuma.

ONTARIO, St. Lawrence District—Whitaker, Hammer, Gueii, Lombard, Shipper's Pride, Glass, Red June, Burbank.

Algoma District—Glass Seedling, Lombard, Moore's Arctic.

QUEBEC—Saunders, Blue Damson, Reine Claude, Lombard, Gueii.

NEW BRUNSWICK—Green Gage, Yellow Egg, Lombard.

P. E. I.—Saunders, Moore's Arctic, Lombard, Damson.

MAN., ALT., Sask.—DeSoto, Forest Garden, New Ulm, Wolfe.

APPLES

The First Fruit, both in importance and general culture, is the apple. Its period, unlike that of other fruits, extends nearly or quite through the year. By planting judicious selections of Summer, Autumn and Winter sorts, a constant succession can be easily obtained of this indispensable fruit for family use.

There is no farm crop which, on the average, will produce one-fourth as much income per acre as will a good apple orchard.

We have, in very large sections of Canada, the soil and climate to produce the best apples in the world—hard, sound, high-colored apples, that bring the highest prices in every market.

The British and other European markets are demanding increased quantities every year. If we give our orchards care and produce the best fruit we can, we have the lead in their markets.

Beside the European market, each year our own rapidly expanding population in Northwest and Northern Canada requires more of our fruit. I fully believe there is today no agricultural outlook more promising than apple orcharding. Unlike other fruits, our hard winter apples can, with any decent care, be sent almost as far as grain to distant countries. Unlike grain, however, no other country can grow such apples as we can.

Where many have failed to make apple growing profitable is in lack of proper care. Some have attempted to grow grain or hay under the trees. This is too much for the land, the moisture is extracted as well as the fertility by the crop, and the trees grow but slowly and the apples are small. Many do not spray at all, and some who do spray only half do the job. It has been clearly demonstrated that Fungus (Scab), one of the most serious troubles of the apple orchard, can be completely destroyed by thorough spraying, and the Codling Moth by bandaging the trees and killing the larvae underneath or by spraying with poison.

In all sections where peaches or plums succeed, an excellent plan in planting an apple orchard is to set a peach or plum tree alternately, also an alternate row. These bear ten to fifteen crops before the apple trees require all the ground, and by that time have passed their prime and can be taken out.

Another excellent plan is to plant apple trees thirty-five to forty feet apart each way and plant between in the row, also a row between of some quick bearing and heavy producing sorts of apples, such as Ontario, Wealthy, Wagner, Pewaukee,

Ben Davis and Gano, removing alternate trees when they begin to crowd each other, finally removing all except the trees intended to be permanent.

In this way the orchard becomes profitable in five years from planting, and if every alternate row is Northern Spy it will be valuable for a long time.

It costs no more to cultivate the ground, or at any rate only a trifle more; an apple orchard should be cultivate permanently, with very few exceptions. Cultivation extends from early May until the middle of July, then orchards should be seeded with something to be turned under the following spring.

When young, any field crop can be grown between the rows, but the ground for at least two feet beyond the spread of the limbs should always be cultivated clean and never asked to support any other crop except the apple tree.

We have been speaking largely of commercial apple growing, but aside from that, on every farm in this fair Canada, where apple trees thrive, there should be at least an acre set for an abundant family supply. We now have varieties of merit suitable for all sections where the mercury does not drop below 45 degrees below zero Fahrenheit, and some that will stand even more cold than that.

SUMMER VARIETIES

***Astrachan Red**—Large, roundish, nearly covered with deep crimson, over-spread with a thick bloom; juicy, rich, acid; a good bearer. July and August.

Benoni—Rich flavor and a deep red color; not successful everywhere. July and August.

Early Harvest—Medium size, round, straw color; tender, sub-acid and fine; productive. July and August. Subject to scab.

Early Strawberry—Medium, roundish; handsomely striped with red; excellent; productive. July and August.

Golden Sweet—Large; pale yellow; sweet and good. August and September.

Keswick Codlin—Large, oblong; pale yellow; pleasant acid. Tree erect, vigorous; bears young and abundantly. Excellent. July to October.

***Lowland Raspberry**—or **Liveland Raspberry**. Best red, early apple, Russian variety, therefore very hardy. Young bearer. Clear, white fleshed, pleasant flavor. The coming early red.

Primate—Hardy, good grower and productive. Fruit above medium, roundish; pale yellow, with blush on sunny side. Flesh fine-grained, tender, juicy, excellent. A fine dessert apple. August to October.

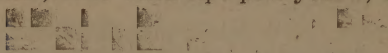
Sops of Wine—Medium, oblong; deep crimson. Fine dessert apple. August.

***Sweet Bough**—Large; pale greenish-yellow; tender and sweet, good bearer. July and August.

Tetofsky—A handsome Russian apple, very hardy and productive; an early bearer; fruit medium to large; yellow, striped with red; acid flavor. July and August.

William's Favorite—Medium size, roundish; flesh yellowish-white; flavor very mild and agreeable; bears abundantly. August and September.

***Yellow Transparent**—A very early Russian apple of good quality and decided merit; color when ripe pale yellow; quality good. July and August.



AUTUMN



***Alexander (Emperor)**—Of Russian origin. Large; deep red or crimson; flesh yellowish-white, crisp, tender with pleasant flavor. Very hardy. October.

Autumn Strawberry—Medium, streaked; tender, juicy, sub-acid; fine; vigorous and productive. September and October.

***Chenango** (*Sherwood's Favorite, Sheep's Nose*)—Oblong, conical, medium to large, yellow ground, over-spread with red on the sunny side; flesh white, juicy, very mild and tender, slightly sub-acid. Season early September. Highly valuable as a table apple. Tree rapid, handsome, upright grower, productive, and at an early date.

Colvert—Roundish, slightly oblate, very large, striped with red on the sunny side, sub-acid, tender; season early October, among the first of the fall apples; a strong grower and heavy bearer.

***Duchess of Oldenberg**—A Russian variety of remarkable beauty, and one of the most hardy and productive varieties under cultivation. Does especially well in sections that are too cold for ordinary varieties. Tree is a vigorous grower and it requires little or no pruning, producing an abundance of fruit very even in size which always sells well in market, and is a money maker. Fruit medium in size. Smooth skin, finely washed and streaked with red on a golden ground, covered with a faint blue bloom. Flesh juicy, sub-acid. Ripens the fore part of September.

***Dudley** (*North Star*)—A hardy, productive variety, which is being planted in some sections exclusively. Fruit fairly large, bright greenish yellow, splashed with red attractive appearance, and good in quality. Tree vigorous spreading grower. Season September and October, sometimes later.

Fall Pippin—Roundish, large to very large; greenish, turning to yellow when ripe; tender, juicy and rich; one of the best fall apples, especially for cooking. Season October. Tree vigorous and productive.

Gideon—Roundish, conical, above medium size to large, skin yellow with a bright, rosy blush; flesh white, crisp, juicy, brisk, sub-acid, liable to water core. Season October and early November. Tree extremely hardy and very strong grower, and moderately productive; valuable for the far north only.

***Gravenstein**—Roundish, large to very large, skin well splashed and streaked with orange red; flesh tender, crisp, sub-acid and very highly flavored; quality very good. Season end of September and October. This is counted on of the very best fall apples, especially in Nova Scotia. Tree a strong spreading grower and very productive.

Hibernal (*Romna*)—Russian, oblate, conical, above medium to large, pale greenish yellow, splashed and streaked on the sunny side with purplish red; flesh yellowish, crisp, tender, juicy, acid; quality about medium. Season September to November. Tree extremely hardy and a strong spreading grower and very productive. This is a fine cooking apple, and on account of its extreme hardness and productiveness one of the best Russian apples.

Haas (*Fall Queen, Grosppommier*)—Oblate, medium to above medium size, skin yellow, well splashed with deep (sometimes brownish) red; flesh white, juicy sub-acid with little characteristic flavor, rather astringent, quality medium only. Tree hardy and a very strong upright grower, and a good annual bearer; desirable only in the colder parts of the apple growing districts.

Jerse Sweet—Medium size, striped, red and green, tender, juicy and sweet a table and cooking apple of merit. Season September and October; a good grower and bearer.

Keswick Codlin.—"A noted English cooking apple, which may be gathered for tarts early in August," and continues in use until November. The tree is an early and abundant bearer, very hardy, and a strong grower. Large, regular and spread-

ing. Fruit is greenish yellow, washed with a faint blush on one side, and is a little above medium size. The flesh is yellowish white—very juicy, and has a rather sprightly acid flavor. Very good.

Longfield—Roundish, conical, slightly angular, medium size, skin pale yellow, almost white, with a bright pink blush; flesh white, crisp, very juicy, very tender melting, sub-acid, quality good. Season October and November. Tree very hardy and moderately spreading grower, somewhat pendulous, a very heavy bearer, and good apple for the north on account of its hardiness.

Maiden's Blush—Medium size, flat, quite smooth and fair; pale yellow, with beautiful red cheek; tender, sprightly, pleasant acid flavor. Fair grower and good bearer. September and October.

McMahon's White—Highly recommended for the cold north. Is a fair, large, yellowish apple, with good market qualities. Spoken of in Wisconsin as being head and shoulders above any other apple. Fruit large, almost white, with a faint blush very beautiful; flesh tender. Tree vigorous and hardy as a crab; bears young and abundantly. October to January.

***North Star**—See Dudley.

Pumpkin Sweet (*Pumpkin Russet*, *Pound Sweet*)—A very large, round, yellowish russet apple, very sweet and rich. Tree a vigorous, rapid, upright grower; valuable. October and November.

Rambo—Medium; yellowish, streaked with dull red and somewhat dotted; mild, tender and good. Fine grower; productive; more especially valuable in the West. October to December.

Red Bietigheimer—A rare German variety, recently introduced. Fruit large to very large; skin pale green color, mostly covered with purplish crimson; flesh white, firm, sub-acid, with a brisk, pleasant flavor. Tree a free grower and abundant bearer. This is one of the largest and handsomest of apples, and promises to be extensively cultivated. September and October.

St. Lawrence—Large; yellowish, striped and splashed with carmine; flesh white, lightly stained, crisp, juicy, tender and vinous. Tree hardy and productive. September and October.

Twenty Ounce Apple (*Cayuga Red Streak*)—A large and very showy apple. Thought to have originated in Connecticut. Tree thrifty, a good and regular bearer. Fruit of fine appearance, extra large in size. Greenish, splashed and marbled with reddish purple. Flesh coarse grained, with sprightly flavor. Popular in the market. October to December.

SELECT WINTER APPLES

America—Originated not far from the Potomac; and brought to notice at the close of the Civil War. One of the best and most popular apples brought to the Washington markets. Tree a vigorous grower and an annual bearer of uniform and perfect fruit. Season, February and March.

American Pippin—Origin uncertain. Fruit medium to large roundish ; greenish yellow with a pink or orange blush or lightly splashed with same ; dots fairly numerous, distinct, but not prominent ; cavity deep, medium in width, sometimes slightly russeted ; stem short and stout ; basin rather deep, medium in width and slightly wrinkled ; calyx large open ; flesh yellow, firm, crisp, juicy, sub-acid ; core small ; quality good. Season late winter. Tree a vigorous spreading grower and productive. An exceptionally good keeping apple. June.

Arctic—This new seedling is unquestionably one of the hardiest of the iron-clads, the original tree having stood for years uninjured in the least in one of the most exposed situations on the St. Lawrence river, where the thermometer falls to 45 degrees below zero. The fruit is unsurpassed in size, beauty and quality by any late keeping winter apple yet introduced ; being very large, of a deep, dark rich red color, of firm texture, brisk sub-acid flavor, it is an attractive and delicious dessert apple of highest excellence. The tree is a rapid, vigorous grower, and an early, annual and good bearer.

Arkansas Beauty—Large to very large ; deep red, tender, yet firm ; one of the handsomest apples grown ; quality good. Tree hardy, vigorous and very productive. December to May.

Arkansas Black—Originated in Northwest Arkansas, and is an enlarged and improved Winesap. Fruit almost black ; flesh firm, rich, crisp, with a rich, high flavor. November to February.

Bailey Sweet—Large ; deep red ; tender, rich, sweet. Vigorous, upright, good bearer. November to April.

***Baldwin**—Large, roundish ; deep bright red ; juicy, crisp, sub-acid, good flavor. Tree vigorous, upright and very productive of fair, handsome fruit. In sections where it thrives, one of the best and most popular winter apples. January to April.

***Baxter**—Originated in Canada. Fruit uniformly large, handsome, delicious, mild acid. Tree extremely hardy, vigorous and productive. December to May.

Beach (*Apple of Commerce*)—One of the most valuable market sorts, commanding the highest price by reason of its size and beauty ; owing to its firmness and long keeping qualities it is one of the most popular for export purposes. Bears young and prolifically. December to June.

Belle de Boskoop—Pronounced one of the most beautiful and profitable of the Russian varieties. Large ; bright yellow, washed with light red on the sunny side and sometimes with a sprinkling of russet ; flesh crisp, firm, juicy, sprightly sub-acid ; quality very good. February to April.

Bellefleur (*Yellow Bellflower*)—Large, irregularly oblong, rich yellow color ; flesh tender, juicy, crisp, with a very sprightly flavor. Tree a moderate grower. November to March.

***Ben Davis** (*New York Pippin, Kentucky Streak, etc*)—Large, handsome, striped and of good quality ; productive ; a late keeper ; highly esteemed in the West and Southwest. December to March.

Bismarck—Originated in New Zealand, showing wonderful productiveness and early fruiting. A stocky grower, making a small low tree, which sends out fruiting spurs and buds at a very early age. A large, handsome apple, of greenish-yellow ground overspread and streaked with crimson and carmine ; excellent for cooking October to January.

***Blenheim** (*Blenheim orange, Blenheim Pippin*)—Growing in flavor all the time. Originated in England. Fruit, large to very large. Yellowish splashed and streaked with dull red. Spicy, slightly acid. Good both for dessert and cooking. Season, November to February.

Boiken—A handsome Austrian variety. Fruit medium to large ; light yellow, shaded with red, resembling Maiden's blush ; flesh snow white and fine grained. Tree remarkably healthy and vigorous, requiring no spraying to produce perfect fruit. January to June.

Bottle Greening—Resembles Rhode Island Greening in size and flavor, but tree is a better grower and much hardier. A native of Vermont. December to March.

Canada Baldwin—This beautiful apple originated in Province of Quebec, Canada, and appears to be of the Fameuse type. Tree very hardy ; vigorous and thrifty grower. It begins to bear quite young, giving heavy and light crops in alternate years. Considered one of the most valuable long-keeping apples both for market and family use. Fruit medium size, nearly round, skin whitish, thickly striped and splashed with rich red and crimson ; flesh very white, fine, sometimes a little stained next to the skin, tender, juicy, with a mild, sub-acid flavor ; core small. January to April.

Canada Red—Oblate, slightly conical ; fruit medium to large ; skin yellow, well splashed and washed with deep rather dull red ; flesh yellowish, tender, moderately juicy, mild sub-acid, with a pleasant but not high flavor ; quality good Season January to April. Tree poor grower, generally productive ; hardy.

Cox's Orange Pippin—Medium size, roundish, ovate ; color yellow suffused with red streaks ; flesh crisp, juicy, sweet, and best in quality. This is regarded by the English as the finest apple in cultivation, either as a dessert fruit or for culinary purposes. Tree a moderate, stocky grower. October to April.

Cooper's Market—Medium, conical, yellow striped with crimson ; flesh white, tender, brisk sub-acid. Vigorous, upright grower. December to May.

***Cranberry Pippin**—A first rate apple. Tree healthy and a good annual bearer. Fruit large ; flesh juicy, sub-acid, and of good flavor.

Crimson Beauty—Synonymous to Scarlet Pippin.

Delicious—The best apple we have ever known. Is the coming commercial sort. Adapted to all apple districts. Hardier than King and Spy. Early and heavy bearer. Delicious spicy flavor. Aromatic. Fruit yellow, well covered with red. Large to very large. January to May.

Delaware Red—Medium to large ; bright red, highly colored ; flesh fine grained, crisp, juicy, sub-acid, excellent ; remarkable for its long-keeping qualities.

English Russet—Medium ovate, greenish yellow, russet. Crisp, sub-acid. A strong grower and regular bearer. Plant Golden Russet instead.

***Fameuse (Snow Apple)**—The most popular Canadian apple. Known in Ontario as the "Snow apple". Originated in Quebec. Fruit, medium size, nearly covered with deep red. Flesh, snow white, fine grained, aromatic. First class in every respect. October to December.

***Fallawater**—Very large, roundish ; yellow, with generally a red cheek ; mild sub-acid ; a popular Pennsylvania apple. October to February.

Gano—Originated in Missouri. Form conical, good size and smooth, deep red, shaded on the sunny side to mahogany ; very attractive ; flesh pale yellow, fine-grained, tender, pleasant, mild sub-acid ; is a good shipper and keeper. Tree healthy, vigorous and hardy ; an annual and prolific bearer. January to May.

***Golden Russet**—Of medium size, round-ovate ; clear golden russet, with slight blush ; tender, crisp, juicy and high-flavored. Tree robust and hardy, bearing large crops. November to April.

Grimes' Golden—Medium ; rich golden-yellow ; flesh crisp, tender, juicy, with a peculiar aroma ; tree a good grower and early bearer ; origin, Virginia. December to April.

Hubbardston Nonsuch—Large, striped yellow and red ; tender, juicy and fine ; strong grower and good bearer. October to April.

Hurlburt—Fruit conical, of medium size, color yellow, shaded with red stripes, and splashed with dark red ; flesh white, crisp and tender, juicy, mild sub-acid, quality excellent. Season December to February. Tree hardy, productive and an early bearer.

Jacob's Sweet—A large, handsome, showy apple, originating near Boston, Mass. Almost round, greenish-yellow, with red cheek. Excellent quality and good keeper ; strong grower and heavy bearer. One of the best sweet apples. December and January.

Jonathan—One of the most beautiful of dessert apples. Its great beauty, uniform size, fine flavor and productiveness in all soils, unite to recommend it to orchard planters. It succeeds wherever grown and proves one of the best for either table or market. Tree hardy, forming an upright, spreading round head. Flesh white, tender, juicy, with a mild, sprightly, vinous flavor ; of the Spitzenburg class. November to April.

***King (King of the Tompkins)**—Fruit roundish, somewhat oblate, of very large size ; skin yellow, crisp, tender, melting, moderately juicy, with a rich, high aromatic and very agreeable flavor ; quality among the best. Season November to January. Tree a strong spreading grower, but an uncertain cropper.

Magog Red Streak—Origin Vermont. Bears annually large crops ; valuable for its extreme hardiness, vigor, productiveness and long keeping ; fruit medium or nearly so ; roundish, inclining to oblong ; skin yellow, shaded with light red over half the fruit ; flesh yellowish, a little coarse, moderately juicy ; mild, sub-acid. December to March.

Mammoth Black Twig—Seedling of Wine Sap, and said to excel its parent in nearly every important point ; better and stronger grower, hardier, fruit much larger, sometimes four inches in diameter and very uniform in size ; color darker red ; flesh firm, flavor mild, sub-acid ; a very long keeper, and is succeeding over a large extent of country. We advise every one to plant a few trees of this sort. November to April.

Mann—Fruit medium to large, roundish, oblate, nearly regular ; skin deep yellow when fully ripe ; flesh yellowish, half fine, half tender ; juicy, mild, pleasant, sub-acid. Good to very good. The tree grows straight and symmetrical, and makes a large tree in the orchard. It is an early and annual bearer. Season, March, but in good cellars will keep till June.

***McIntosh Red**—An exceedingly valuable, hardy Canadian sort. Medium size, nearly covered with dark red. Flesh white, very tender, juicy and refreshing. A good annual bearer of fair, handsome fruit. Resembles the Fameuse, but larger and more hardy, and fully equal in quality to this standard sort. November to February.

***Milwaukee**—A seedling of Duchess which originated in Wisconsin. Fruit large, oblate, slightly angular; skin pale yellow well splashed and washed with bright red and crimson; dots few, small, white, not prominent; cavity deep and of medium width, slightly russeted; stem short, moderately stout, basin deep, open, slightly wrinkled; calyx open. Flesh yellowish, crisp, very tender, juicy, acid, with but little characteristic flavor; core small. Quality above medium; season, December to March. Tree spreading, a moderate grower and an early and good cropper. A promising apple for the north, as it appears to be very hardy.

Milding—Tree remarkably hardy; a strong, vigorous, upright grower; very productive of large, fair fruit, very desirable and hardy, sub-acid, yellow with red stripe. January.

Newtown Pippin (Yellow)—Medium to large, roundish, yellow, very firm, crisp; juicy, with a highly agreeable flavor. This most celebrated of American Apples is a slow, feeble grower, with rough bark; requires high culture, and then only succeeds in certain localities. November to June.

***Northern Spy**—Large, roundish, slightly conical, somewhat ribbed; striped with the sunny side nearly covered with purplish red. Flesh white and tender, with a mild sub-acid, rich and delicious flavor. In perfection in January and keeps till June. The tree is a strong upright grower, and forms a very compact head; should be kept open by pruning, so as to admit the air and light freely.

North Western Greening—Oblate, nearly round, large, green, turning to yellow when fully ripe; flesh yellow, somewhat coarse, juicy, sub-acid; quality good. Season January to May. Tree extremely hardy, having it is said, stood 50 below zero; productive.

Opalescent—One of the handsomest apples grown. Highly colored and susceptible of a very high polish, thus making it greatly prized for fruit stands. Flesh yellowish, tender, good. Large size, oblong; light red, shading to very dark crimson. December to March.

***Ontario**—A hardy Canadian Winter Apple, early and productive bearer, large in size, a cross between Northern Spy and King; the coming Apple for the English market; valuable as a late keeper; so closely resembles Northern Spy that experts have taken it for that variety. Crops annually, and at an early age. January and February.

Patten's Greening—Seedling of the Oldenburg and equals it as an orchard tree in hardiness and bearing. Large, uniform size, pleasant, acid, good.

***Pewaukee**—A seedling from the Duchess of Oldenburg. Fruit roundish, oblate; medium to large; a bright yellow, partially covered with dull red; flesh yellowish, white, crisp, juicy, flavor sub-acid. Season December to March. Tree a strong, upright grower, very hardy and very productive, and comes into bearing at a very early age.

Phoenix—Roundish, slightly oblate, medium to large; color light yellow splashed and streaked with rich red; flesh yellowish, coarse, moderately juicy, sub-acid. Season December to March. Tree productive, hardy, but a slow grower.

Pomme Grise—Oblate, small, a beautiful grey russet apple with a slight blush next the sun; tender and highly flavored. Season December to May. Tree a very poor grower, moderately productive.

Princess Louise—Fruit medium size ; color greenish, almost covered with a handsome rich red, splashed and striped ; quality first-class. Season November to February. Tree hardy and productive.

Red Russet—Said to be a cross between the Baldwin and Rox-Russet. Good grower, regular bearer, and resembled the Baldwin. Flesh crisp, juicy, pleasant sub-acid. Keeps till April and May. Good eating in February. Fruit always large, uniform and handsome.

Ribston Pippin—Well known as a first-class variety. Size medium and good quality. Yellowish green, clouded with red. November to April.

Rome Beauty—A large round apple, greenish, dull red on the sunny side ; tender, juicy, crisp, sub-acid. Season December to March. Tree a moderate grower, productive and hardy, and an annual bearer. Fruit hangs well on the tree.

Roxbury Russet—Very similar to the Nonpareil of Nova Scotia. Fruit oblate, conical, medium to large ; color greenish yellow, more or less russeted, sometimes with a bronze blush ; flesh yellowish, tender, moderately juicy, sub-acid, with a good, rich flavor ; quality very good. Season February to June. Tree moderately vigorous, but productive.

***Rhode Island Greening**—Roundish, oblate, large to very large, greenish, turning to greenish yellow when ripe, sometimes with a light blush on the sunny side ; tender, juicy and rich, with a somewhat acid flavor. One of the very best cooking apples, on the entire list. Season December to March. Tree a very strong grower, of a somewhat spreading habit, still one of the most profitable apples to plant in the Southern apple belt.

Rolfe—Oblate, size large, color yellow, mostly covered with dark red, sometimes striped ; quality good, both for dessert and cooking. Season November to January. Tree hardy, productive and an annual bearer.

***Salome**—Tree a strong grower ; equals Wealthy in hardiness ; an early and annual bearer ; fruit of medium and uniform size ; quality very good, which it retains even into the summer ; keeps well with ordinary care until July.

***Scott's Winter**—This a very hardy variety and has been long tested. An early and profuse bearer ; flesh yellowish-white, slightly red near the skin. Sub-acid in quality. December to June.

Seek-no-Further (Westfield)—Medium to large ; slightly russeted, with dull red stripes ; tender, rich, spicy and fine ; good bearer. November to February.

Scarlet Pippin—Hardy and productive, medium size, round, skin yellowish, waxy, covered with crimson in stripes. Firm flesh, crisp and melting, sub-acid, juicy ; core small. Might be taken for McIntosh Red. Early winter.

Snow—Same as Fameuse.

***Spitzenburg, Esopus**—Medium to large ; deep red ; flesh yellow, crisp, sub-acid, high flavored. Bears and grows well transplanted in rich soil. November to April.

***Stark**—Esteemed as a long keeper and valuable market fruit. Fruit large, roundish ; skin greenish-yellow, much shaded with light and dark red, and sprinkled with brown dots ; flesh yellowish, juicy and mild sub-acid. January to May.

Stayman's Winesap—One of the finest apples in cultivation ; much superior to its parent, the old Winesap, in size, flavor, color and keeping qualities, and now attracts attention everywhere as a profitable market variety. It has size, color, productiveness and quality to commend it. Tree vigorous, irregular and drooping in habit and adapts itself readily to varying soils and situations. Truly a great apple. December to May.

Sutton Beauty—Fruit large ; waxy-yellow, striped with crimson ; flesh white, tender, juicy, mild acid ; quality good and a remarkable keeper. Tree vigorous, a handsome grower, very productive. One of the most valuable market sorts. October to February.

Talman Sweet—Medium ; pale yellow, slightly tinged with red ; firm, rich and very sweet ; the most valuable baking apple ; productive. November to April.

Wagener—Medium to large ; deep red in the sun ; flesh firm ; sub-acid and excellent ; very productive ; bears very young. December to May.

Walbridge—Medium size ; striped with red ; handsome and of excellent quality. Vigorous grower and productive. Very hardy, and considered of great value in the North and North-West. March to June.

Wealthy—A native of Minnesota, where it has proved perfectly hardy, vigorous and productive. Fruit of medium size, red streaked with white ; quality good. December to February.

Windsor Chief—A very hardy variety. Fruit good size, attractive red, pleasant flavor and good quality. Early bearer, reliable cropper. December to April.

Winterstein—A seedling of Gravenstein, introduced from Mr. Luther Burbank, of Santa Rosa, Cal. Winterstein ripens with the Baldwin and R. I. Greening, some six weeks later than Gravenstein. Tree is a grand grower and as productive as an apple can be. Quality, tenderness, and texture of fruit remarkable ; flesh yellowish, spicy, rich, sub-acid. It has a flavor all its own. In appearance and coloring it resembles Ben Davis. December to April.

Winter Maiden's Blush—This fine apple is rapidly becoming popular. The original tree bore excellent fruit at the age of seven years. The tree is hardy and a fine grower. Fruit large, irregular, sometimes flattened and at others slightly elongated, inclining to conic ; skin light, waxen yellow, with a red cheek in the sun ; stem medium length, inserted in a rather deep cavity, often surrounded with russet ; calyx small, basin of moderate depth ; flesh yellowish white, crisp, very fine grained, juicy, with a very pleasant sub-acid flavor and a very fragrant and agreeable aroma. Season, November to late winter.

Winter St. Lawrence—A new apple brought to the notice of the public through the members of the Montreal Horticultural Society. Originating and succeeding in the Province of Quebec, where the climate is as trying to the production of apples as any on the continent, where the attempt is made to grow them. This must, therefore, be classed as one of the very few extremely hardy. Fruit somewhat resembling the well-known fall St. Lawrence, with the additional merit of being a winter apple. January.

Winter Banana—Originated in Indiana, and so highly endorsed in Michigan that we believe it will succeed well in Canada. It is large ; fine grain ; golden yellow ; shaded with red ; sub-acid ; fine flavored, juicy, rich, and a good keeper ; and erect

thrifty grower; a young prolific bearer; a fine table apple. Bears large clusters of fruit at two years old; flavor unsurpassed by either peach, plum or pear. January.

Winesap.—Medium; dark red; sub-acid, excellent. Tree a moderate grower and abundant bearer. A favorite market variety in the West. December to May.

Wismer's Dessert.—Size medium to large. Smooth, beautifully colored with yellow, shaded with bright red, in strips and blotches, marked with russet dots. Exquisite delicious flavor, juicy, melting, buttery, pear-like texture. Tree a strong grower and extremely hardy. Originated in Northern Ontario, Canada. Season November to April.

***Wolf River.**—A new and beautiful fruit of the very largest size. Originated near Wolf River, Wisconsin, and may well be classed among the iron-clads. Skin greenish yellow, shaded with crimson; flesh white, juicy, tender with a peculiar, pleasant, mild sub-acid flavor. Tree a strong, stout grower, and a great bearer. January and February.

Yellow Belleflower (*Bishop's Pippin*).—Tree a strong grower and abundant bearer; fruit medium to large; flesh white, fine grained, tender, juicy, sub-acid. November to February.

***York Imperial.**—Of medium size, truncated, oval, angular; skin greenish-yellow; flesh tender, crisp, aromatic. Highly esteemed. November to January.

SELECT CRAB APPLES

As an ornamental fruit, and for jellies, preserving, etc., the Crab Apple is unequalled. All are very hardy and prolific, come into bearing when very young, and command a ready and profitable market. We name the best sorts.

Excelsior.—Raised from seed of Wealthy, in Minnesota. Very hardy, productive and one of the best flavored varieties. This is not a Crab, but a very choice eating apple. September.

Ge. Grant.—Large; round, yellow striped with dark, almost black, red on the sunny side; flesh white, fine-grained, mild sub-acid. October.

Hyslop.—Large, roundish-ovate; dark red, with a blue bloom; flesh yellowish; excellent for cider; tree hardy. October to December.

Martha.—Immensely vigorous, hardy, producing every year. Mr. Gideon says; "For sauce it surpasses any apple we ever grew." A great acquisition. October.

Montreal Beauty.—Large; yellow, shaded with rich red; flesh yellowish, rich, firm, acid. One of the handsomest Crabs. October and November.

Siberian, Red.—About an inch in diameter, grown in clusters; yellow, lively scarlet cheek; bears young and abundantly. September and October.

Siberian, Yellow.—Nearly as large as the above; fine amber or golden yellow color. September and October.

Transcendent.—Tree immensely productive, bearing after second year, and producing good crops by the fourth season. Fruit from one and a half to two inches in diameter, being large enough to quarter and core for preserving and drying. Excellent for sauce and pies, both green and dried. The best of its class for cider, being juicy and crisp, and is also by many considered a good eating apple. Skin yellow, striped with red. September and October.

Van Wyck.—Large, skin mottled with bright red; *sweet*. Tree vigorous. October and November.

Whitney's Seedling.—Large; splashed with carmine; flesh firm, juicy and rich. A great bearer and *very* hardy. Tree a vigorous handsome grower. Has no superior, if an equal. August.

SELECT APRICOTS

A delicious fruit of the plum series, valuable for its earliness. It is liable to be attacked by curculio, and requires the same treatment as the plum; it bears immense crops, ripening in July and August.

Alexander.—Very hardy; an immense bearer; fruit large, yellow, flecked with red; very beautiful, sweet and delicious. July.

Early Golden.—(*Dubois*)—Small; pale orange, juicy and sweet. Hardy and productive. First of July.

J. L. Budd.—Tree a strong grower and profuse bearer. Fruit large, white, with red cheek; sweet, juicy, with a sweet kernel, as fine flavored as an almond. The best late variety, and a decided acquisition. August.

Montgamet.—Large, early; one of the best. Flesh firm, juicy and excellent. The best for eating out of hand. Tree very productive, and promises to become a great favorite.

St. Ambrose.—One of the largest and finest apricots, ripening about the same time as Large Early.

CHERRIES

Cherry trees will thrive in almost every part of Canada on suitable soil. The soil must be dry; it might be light sand or clay loam, or any soil between these; the only stipulation is dryness. Cherry trees will not thrive on flat or wet land. The Hearts and Bigarreaus, commonly called English cherries, are strong, rampant growers, and should be set 20 to 25 feet apart. They are not hardy enough except for southern and favorable parts of middle Ontario and the favorable parts of the Maritime Provinces and British Columbia. They bear enormous crops, frequently as much as 300 quarts from single trees, and in some cases much more, and are always in demand at good prices. At present there is a large profit in a cherry orchard in full bearing.

The Morello cherries thrive over a much wider area, some of the varieties being hardy enough for all sections of settled Eastern Canada, and these are equally profitable with the Hearts and Bigarreaus in most cases. Red cherries of the Morello class are wanted by every householder in the land, hence the demand is enormous and never satisfied.

Black knot attacks the Morello, but does not attack the others. Black knot, however, is no longer any bugbear to fruitgrowers. It is only necessary to examine the trees two or three times a year and cut off and burn any knots found when in the green state to prevent it spreading further. It can only spread from ripe spores or black knots.

Sour cherries or Morellos should be planted from 14 to 20 feet apart, according to varieties and soil, and if the ground is rich so much the better. Sour cherries also require dry ground, but are not quite so fastidious in that respect. The Morellos have slender spreading branches.

The third class into which cherries are usually divided is the Duke. These grow very upright and stout, but do not require the room necessary for Hearts and Bigarreaus. The fruit is semi-acid. The tree is subject to black knot, though perhaps not quite so subject to it as the Morellos. The Dukes too, bear heavy crops and are harder than Hearts or Bigarreaus; in fact, the Dukes occupy a place midway between the two other classes, as near as can be, in many respects.

Hearts and Bigarreaus.—Of these Napoleon Bigarreau are our first choice among the light colored, and Black Tartarian, Windsor, and Schmidt's Bigarreau among the blacks. Dates of ripening are for the Niagara District and may differ some seasons, but are given for comparison and are exact when so stated.

HEART AND BIGARREAU CHERRIES

Bing—A new and handsome cherry. Originated at Milwaukee, Oregon. Very large, black, juicy, slightly vinous, delicious flavor; excellent for shipping. Tree thrifty, upright grower, hardy and productive.

Black Oxheart—An extremely large, deep black cherry; very productive tree, a strong grower; quality first rate. Ripens late, about July 20th to 25th.

Black Eagle.—Large black, very tender, juicy, rich and highly flavored. July.

Black Heart—A very old variety. Fruit medium size, heart shaped, irregular; skin glossy, deep black; flesh tender, juicy, rich, sweet. Tree a rather rapid grower, hardy and productive. Early in July.

***Black Tartarian**—Very large, bright purplish black; half tender, juicy, very rich, excellent flavor, productive. July 1st to 10th.

Coe's Transparent—Medium size, pale amber, red in the sun; tender, juicy, rich, handsome, one of the best of its season, productive. End of June.

Compass Cherry—A cross between the Rocky Mountain Cherry and the Native Plum, and resembles both. The most remarkable fruit of recent origination. Hardy as any wild plum. Sweet, juicy, and excellent flavor. Marvellously prolific bearer. Grows on any soil. Fruits every year—never misses. Bears second year after planting. Good shipper and fine cooker. The only cherry that is perfectly hardy in Minnesota, Wisconsin, Iowa, the Dakotas and Montana.

Downer's Late Red—Medium size, light red, tender, juicy, semi-acid, a cooking rather than an eating cherry; productive. July 15th to 20th.

Elton—Large, fine flavor, pale yellow, light red next to the sun. Tree extra strong grower and very productive. End of June.

Early Purple—Medium size, purple, tender, juicy, sweet. Middle of June.

***Gov. Wood**—One of the best cherries; very large, light red, juicy, rich and delicious. Tree healthy and great bearer. End of June.

***Knight's Early**—Large, black; tender, juicy, rich; productive. Ripe about the end of June.

Lambert—Size very large, form roundish heart-shaped, cavity medium, stem long, surface smooth glossy color, dark purplish red, with numerous minute indented russet dots; flesh dark purplish-red, meaty and of firm texture, stone oval, semi-cling small for so large a fruit, flavor sweet or very mild sub-acid, aromatic, rich, quality very good.

Luelling—(*Black Republican*)—A native of Oregon. Fruit very large, shining black; flesh very solid and firm, fine; a good keeper and will bear transportation well. Tree a moderate grower and rather tender; an early and profuse bearer.

Napoleon Bigarreau—Very large, pale yellow or red, very firm, juicy and sweet; productive. One of the very best. July 10th to 15th.

Rockport Bigarreau—A firm, large, light colored cherry with red cheek. Ripens at the same time as Black Tartarian.

Schmidt's Bigarreau—A most valuable cherry; fruit of an immense size, of a rich, deep brown; flesh dark, tender, very juicy, with a fine flavor; bears abundantly and makes a most noble dish for the table. July 15th to 20th.

Windsor—Originated at Windsor, Ont. A very large, roundish cherry, of brown color; unfortunately seems more subject to rot than many others. Tree exceedingly regular and productive cropper. Season July 15th to 20th.

Yellow Spanish—Large, pale yellow, with red cheek, firm, juicy and excellent one of the best light colored cherries; productive. July 1st to 5th.

DUKES AND MORELLOS

Baldwin—Tree upright, vigorous, forming a round head. Fruit large, round, very dark. Flesh the sweetest and richest of the Morello type. Unexcelled in earliness, vigor, hardiness, quality and productiveness.

Bessarabian—New Russian cherry of considerable merit; small stone; color dark red. Sub-acid. Tree a vigorous grower.

***Dyehouse**—Partakes of both the Duke and Morello in wood and fruit, a very early and sure bearer, ripens a week before Early Richmond, of better quality and productive. Last of June.

***English Morello**—Medium size, blackish red, rich, acid, juicy and good; long stem; very productive. Last of July and early August.

***Early Richmond** (*Kentish Virginian May*)—Medium size, bright red, melting, juicy, sprightly, acid flavor. This is one of the most valuable and popular of the acid cherries, is unsurpassed for cooking purposes and is exceedingly productive. Last of June and first of July.

Empress Eugenie—Large, dark red; productive; tree robust and hardy, belongs to Duke class. Ripe about first of July.

Late Duke—Large, light red, late and fine. July.

Louis Phillippe—An excellent hardy variety; very vigorous and productive; large size; rich, dark, red; flesh red, with sub-acid flavor. Season middle to end of July.

May Duke—Large, dark red, juicy and rich, an excellent old variety; productive. End of June.

***Montmorency, Large**—Tree very hardy and an immense bearer; commences to fruit while young, and is loaded annually thereafter with fine crops. Fruit very large, fine flavor and of bright, clear, shining red; valuable everywhere; a week later than Early Richmond. The finest acid cherry.

***Montmorency Ordinaire**—A beautiful large, red acid cherry, larger and finer than Early Richmond and fully ten days later. Being extraordinary prolific and hardy, it can be recommended as a variety of great value. Tree a free grower.

Olivet—Of French origin. Large, globular, very shining, deep red sort, flesh red, tender, rich and vigorous, very sweet, sub-acid flavor. Last of June.

Orel No. 24—Tree a medium grower, healthy, hardy, bears early, quite productive. Fruit about medium size, dark in color, nearly black when ripe, stem about medium length. Flavor rich, spicy, pleasant. One of the very best for canning.

Orel No. 25—One of the later importations from Russia; tested at the Experimental Farm, Ottawa, and found to be both hardy and productive, and fruit of about the same size as Early Richmond. Morello type.

Ostheim—A hardy cherry from Russia. It has been tested in the severest winters of Minnesota and has been found perfectly hardy. Fruit small to medium size, roundish, ovate; skin red, dark at maturity; stalk long; flesh liver-colored, tender, juicy, almost sweet. Ripe latter part of July.

Reine Hortense—Very fine; large, bright red, juicy and delicious; productive. July.

Improved Rocky Mountain Dwarf Cherry—From Colorado where it has been under cultivation for some time and received the highest endorsement from the leading horticulturists and fruit growers of that state. As hardy as Wyoming sage bush, it has withstood a temperature of 40 degrees ripe and in sizes averages somewhat larger than the English Morello, its season of quarts having been picked from a three-year-old bush. The fruit is jet black when ripe and in size averages somewhat larger than the English Morello, its season of ripening being after all others are gone. In flavor it is akin to the sweet cherries. Worthy of cultivation for an ornamental shrub. When in bloom will grace any lawn with its mass of white flowers.

Royal Duke—One of the best of the Duke class; ripens after May Duke.

Vladimir—Extremely hardy Russian. Tree much smaller than other sorts, fruit of fair size and nearly black. Valuable on account of extreme hardiness.

Wragg—Another hardy cherry of recent introduction from Russia. Later than Vladimir, and like it, valuable for extreme northern sections. Ripe end of July, and said to be same as English Morello, which it certainly very much resembles.

PEACHES

The best soil for the peach is moderately rich, somewhat sandy loam, but will succeed in almost any soil, except a heavy wet clay. The ground should be kept clean and mellow around the tree.

In the cultivation of the peach we would recommend the shortening in system. This should be done in February or March. Cut off from one-third to one-fourth of the previous year's growth. This course should be pursued every year. The trees so treated live longer, are broken down less by the wind and produce larger and better fruit, which is more easily gathered than from trees grown by the old method.

Careful examination should be made each season, and all the borers removed with a knife. A half-peck of air-slacked lime or leached ashes placed around the trunk of the tree in May and allowed to remain until October, affords a good protection against the depredations of this pest.

We grow many thousand peach trees annually. Orchardists, wishing to purchase largely, would find it to their interest to correspond with us.

(F) FOR FREE-STONE; (C) FOR CLING; (S C) FOR SEMI-CLING

***Admiral Dewey**—(S C)—Fine size, form and color, with delicious yellow flesh that is yet firm enough to ship well. The tree is strong, hardy symmetrical grower and produces well. Ripening with the Alexander.

Alexander—(C)—A very early peach, fruit of medium size, skin a rough down, pale, handsomely shaded on the sunny side; flesh white, tender, melting, juicy, rich. One of the best. Middle of July.

***Banner**—(F)—Large, yellow with crimson cheek. Flesh yellow, firm, rich, excellent. Good shipper; early bearer, and productive. One of the best late market varieties. October.

Barnard's Early—(F)—A medium size, popular peach; yellow with red in sun; flesh yellow and very good; tree vigorous and good bearer. First of September.

***Beer's Smock**—Large to very large; yellow, with red cheek; flesh yellow and of the very best quality for the season; a regular and enormous bearer, making it very desirable for market purposes. September. (f).

Belle of Georgia—Very large; skin white, with red cheek; flesh white, firm, and excellent flavor; the fruit is uniformly large and showy; very prolific bearer. A seedling of Chinese Cling. Not recommended for Canada. (f).

Bokara—The best of Prof. Budd's importations from Bokara; said to be the hardiest peach grown. Large, fine quality, immensely productive. Last of August. (f).

Capt. Ede—Originated in Southern Illinois, and among leading fruit growers considered one of the best orchard peaches. Ripens with Crawford's Early. Freestone. Very hardy; yellow with carmine cheek.

Carman—(F)—Large, resembling the Elberta in shape; creamy white or pale yellow, with deep blush; skin very tough; flesh tender and of fine flavor, juicy. Prolific bearer, profitable market variety. Ripens August.

Champion—(F)—A Western peach of very large size and good quality. Specimens measuring ten inches in circumference. Noted for the regularity of its bearing. Skin is of a rich white with a red cheek. Flesh creamy white, sweet and delicious, rich and juicy. Should be in all peach orchards. August.

***Chair's Choice**—(F)—Originated in Maryland. Fruit of very large size; deep yellow with red cheek; flesh yellow, firm and of good quality. Tree strong grower and productive. Last of September.

***Crawford's Early**—(F)—A magnificent large, yellow peach, of good quality. Its size and beauty make it one of the most popular orchard varieties. Fore part of September.

***Crawford's Late**—(F)—Very large, roundish, skin yellow, with a beautiful dark red cheek, flesh rich, yellow, melting, with sweet luscious flavor, worthy of universal cultivation as table and market sort. Latter part of September.

***Crosby**—(F)—Originated at Billerica, Mass., about 1875, and recently brought to general notice on account of its extreme hardness, bearing full crops of choice, attractive fruit when all other sorts have been blasted by frosts. The fruit is of medium size, roundish, slightly flattened, with a distinct seam, bright orange yellow, streaked with red on the sunny side, flesh yellow, of a mild pleasant flavor. Tree of low spreading growth, similar to Hill's Chili. Promises to be very valuable for general cultivation. In season about with the Old Mixon. Middle September.

***Early Mamie Ross**—(S C)—Yellowish white with red cheek. Much better than Triumph and earlier. Right in the same class as the Mayflower.

Early Canada—This early peach is a native of Jordan, Ont., a chance seedling. Ripens one month before Crawford's Early. Good samples measure over seven inches in circumference; unusually hardy for a peach. Middle to end of July. Resembles Alexander very much. (S C).

***Early Elberta**—Freestone. Is ten days earlier than Elberta. Large, same shape as Elberta, highly colored and much better in quality. Will be the great shipping peach.

Early Rivers—Large, light straw color, with delicate pink cheek; flesh juicy and melting, with very rich flavor. About a week earlier than Hale's. Very hardy and very productive. One of the most regular bearers we know of, but is a clingstone. August.

***Elberta**—(F) Large, yellow, with red cheek, juicy and high flavor; flesh yellow; supposed to be a seedling of Chinese Cling. Ripe July; an excellent shipping variety.

***Engle's Mammoth**—A fine large market variety, somewhat resembling Late Crawford, but far more productive. Yellow, with red cheek, small freestone, sweet and juicy. Early September.

Foster—Large ; deep orange red, becoming very dark red on sunny side ; flesh yellow, very rich and juicy, with sub-acid flavor. Very handsome. First of September.

***Fitzgerald**—Originated at Oakville, Ont. A very large, hardy yellow peach, freestone, ripening just close after Early Crawford, which it somewhat resembles. A valuable hardy sort and productive.

Greensboro—A large peach, color a beautiful creamy white, with a red cheek when exposed to the sun. Season same as Early Rivers, or nearly so. Very hardy and productive. One of the most valuable early peaches for market. Semi-cling.

Garfield or Brigdon—Large size ; flesh yellow, very rich and juicy ; color deep orange, becoming red on exposed side ; very attractive ; foliage large, green, glossy and peculiar. First of September. Season immediately after Early Crawford, which it resembles.—Productive.

Golden Drop—Medium size ; very handsome yellow peach with bright clear skin, quality choice. Season latter part of September, earlier than Smock, Very productive. A valuable peach.

Gold Mine—Cross of Banner and Crawford's Late. Larger than Crawford's Late. Bright yellow, with handsome shade of red. Small pit. Fruit high quality.

***Golden Swan**—The greatest peach of them all. Yellow flesh, striped medium size. Better than Yellow St. John and ten days earlier. Plant this rather than any other. Freestone.

Hale's Early—Fruit medium to large size ; skin clear, smooth, white, delicately marbled with bright and dark red on the sunny side ; flesh very melting, juicy and highly flavored. Middle of August. The last of the early peaches and usually sells well. Clingstone.

Hill's Chili—Medium size, dull yellow, tree very hardy, very productive ; highly esteemed as a market fruit. Almost identical with Longhurst, if not the same. Last of September. (F)

Honest John—Medium to large ; yellow ; flesh yellow and of good quality. Tree vigorous and productive. Immediately before Early Crawford. (F)

***Jacques' Rareripe**—Very large, deep yellow ; has a high reputation as it is undoubtedly one of the very best large yellow peaches and coming in at a season when such peaches are in demand. Middle of September.

Kalamazoo—Large golden yellow with crimson cheek. The thick yellow flesh is of good flavor and the pit is small. Strong grower. Season September. (F)

Lemon Free—Medium to large ; greenish yellow turning to yellow when fully ripe. A splendid shipper, very exempt from rot ; quality good. Enormously productive ; tree very hardy in the bud. A valuable sort.

Longhurst—Originated in Ontario. Is extremely hardy, bearing annually large crops where most others will not bear at all. Yellow flesh, freestone, and on account of hardness of tree, period of ripening and general good qualities, makes it very valuable for market in localities where Crawfords are too tender. It is not as handsome as Early Crawford, Elberta or other large yellow peaches, not quite as large, even if thinned as it should be on the tree. Ripens between the Late Crawford and Smock, or middle of September.

***Mayflower**—We have been growing this for several years without realizing what a wonderful peach it was. Is a beautiful peach "red all over". The very earliest peach known. Splendid quality, then—it comes into bearing the second year from planting. A good crop right from the start. Semi-cling.

***Millionaire**—Extra large, excellent quality. Deep yellow flesh, small pit. Yellow with deep red cheek. One of the favorite peaches in the St. Catharines district. A week later than Early Crawford. Very productive. Freestone.

Mountain Rose—Large ; white with red cheek ; flesh white, juicy, rich and excellent ; one of the best early peaches, especially for home use. Should be in every collection. Last of August or just before Early Crawford.

***Niagara**—Surpasses Elberta and Crawford in size, quality and vigor. Ripens between these two.

***New Prolific**—Large yellow, fine flavor. Strong and hardy grower. Very prolific. September.

Oceana—A cross between Early Crawford, and Hill's Chili. Combines the best qualities of them both. Fruit, large, well colored. Flesh deep yellow. Good keeper and shipper. Earlier than Early Crawford.

Old Mixon Free—Large ; pale, yellow, with a deep red cheek ; tender, rich and good ; one of the best. First to middle of September.

Picquet's Late—Very large ; yellow, with red cheek ; flesh yellow, buttery, rich, sweet and of the highest flavor. Maturity from end of August to middle of September. This variety seldom fails to produce a crop of fruit, one of the most profitable late yellow peaches South and West.

Ray—Above medium size ; white flesh, with red blush ; firm and good shipper and a good seller on the market. Trees are strong growers, noticeably so, compared with other varieties. A regular bearer. The fruit continues in ripening longer than any other variety we know and we earnestly recommend that our customers plant this valuable peach for profit in all commercial orchards.

***Red Bird Cling**—Very early ; way ahead of Triumph. High color, good quality. large, creamy white, covered with bright red.

Reeves Favorite—Origin, Salem, N.J. Hardy and very productive ; flesh deep yellow at the stone, juicy, melting, with a good vinous flavor. September. (f)

Salway—Fruit large, roundish ; deep yellow, with a rich, marbled, brownish-red cheek ; flesh yellow, firm, juicy, rich and sugary. October. (f.)

Schumaker—One of the earliest peaches known. Of very large size, some samples measuring eight or nine inches in circumference ; stands the winters as well as the early Crawford ; flesh yellowish-white and quality good. August. (f)

Smock—Large size ; light orange-yellow, with red cheek ; flesh yellow, juicy and rich. October. (f.)

Sneed—From seed of Chinese Cling. Ripens ten days earlier than any other peach. Flesh sweet and delicious. (c.)

Triumph—The tree is a strong grower and perfectly hardy ; fruit large, skin yellow, red and crimson, very attractive ; flesh bright yellow ; great bearer and shipper ; flavor excellent ; the earliest yellow freestone peach. July.

Wager—Medium ; yellow, colored in the sun ; juicy, fair flavor. The trees have remarkable vigor and vitality ; valuable for drying and canning. August. (f.)

Yellow Rareripe—Large ; deep yellow, dotted with red ; melting, juicy, with a rich flavor ; closely resembles Jacques' Rareripe. First of August. (f.)

***Yellow St. John**—Large ; yellow, with handsome blush ; early and productive. Flavor equal to the Crawford. Profitable market variety on account of its earliness. July. (f.)

PEARS

The cultivation of this noble fruit is extending, as it is found it can be shipped to Britain with profit and success. The range of varieties is such that, like apples, they can be had in good eating condition from August until early spring.

The Pear, like most things highly desirable and valuable, cannot be had without attention, labor and skill.

One of the most important points in the management of Pears is to gather them at the proper time.

Summer Pears should be gathered at least ten days before they are ripe, and Autumn Pears at least a fortnight. Winter varieties, if they will hang so long, may be left until the leaves begin to fall.

The Pear succeeds on most soils, but does best on a rather heavy loam. Budded on its own stock, it makes a standard tree, and on the French or Angers Quince, a dwarf, the former being best adapted to large permanent orchards, the latter for yards and gardens.

Dwarfs must always be planted sufficiently deep to cover the junction of the Pear and Quince two or three inches—the soil made rich and well tilled, and about one-half of the previous summer's growth cut off each spring. Under this treatment, Dwarfs are everywhere successful. The side branches should not be removed higher than one foot from the ground in Dwarfs, while Standards may be trimmed to the height desired, although the best planters are not trimming branches from the trunks, but allowing them to grow in order to shade the trunk as much as possible. Gather when, on gently lifting the fruit, the stem will readily separate from the limb. Winter pears may hang on the trees until there is danger from frost, then place in a dry cellar for maturing.

The letters "D" and "S" appended to the description of varieties indicate favorable growth, either as "Dwarfs" or "Standards," or both.

SUMMER VARIETIES

***Bartlett**—Large size, with often a beautiful blush next the sun; buttery, very juicy and highly flavored; bears early and abundantly; very popular. Taking all points into consideration, by far the most valuable pear ever introduced. D. and S. August and September.

***Beurre Giffard**—An excellent variety; medium size; greenish yellow, red in the sun; very early; very productive, moderate grower. D. and S. Early August just before Clapp's Favorite.

***Clapp's Favorite**—Very large; yellowish green to full yellow when ripe, marbled with dull red in the sun, and covered with small russet specks, vinous, melting and rich. Very productive; being an exceedingly vigorous grower it succeeds well on the very hardest clay. D. and S. Early August, just before Bartlett.

Koonce—Medium to large; yellow when ripe, reddish on the exposed side, buttery texture, spicy, juicy, sweet; very early. Tree vigorous, unusually free from blight. S.

Lawson or Comet—Medium to large; yellow, flushed with the most beautiful crimson; flesh crisp and juicy; a firm, good shipper, and a salable and valuable market variety. Early August, same season as BEURRE GIFFARD. Tree a strong vigorous but nugainly grower; productive. D. and S.

Tyson—Medium size, bright yellow, cheek shaded with reddish brown, buttery, very melting; flavor nearly sweet, aromatic, excellent; very productive. S. August and September.

Wilder—Medium size, yellow, with red cheek, fine quality; ripens very early, about with Lawson and Giffard; not inclined to rot at the core; moderate grower, good yielder. D. and S.

AUTUMN VARIETIES

Bartlett-Seckle—Medium to large ; high color ; handsome rich and well flavored ; of highest quality, being a cross between two of our best pears and combining most of the good points in each. Tree vigorous and productive. September and October. S.

Beurre Clairgeau—Very large pyriform ; skin yellow ; inclined to fawn, shaded with orange and green, covered with russet dots ; flesh yellow, somewhat granular, with a slightly perfumed, vinous flavor ; quality coarse. Very productive, a profitable pear for export. D. and S. October and November.

Beurre Bosc—A large, fine pear of very distinct shape, having a long neck, a long stem and hangs well on the tree. Russet yellow, slight brownish, red in the sun ; flesh white, melting, juicy, sweet, perfumed ; productive. This topworked on Keiffer, as I grow them in the nursery, is one of the very best and most profitable pears grown. It grows feebly on its own stock. S. September and October.

***Beurre D'Anjou**—Very large, greenish, sprinkled with russet, sometimes shaded with dull crimson ; flesh whitish, buttery, melting, with a high, rich, vinous, excellent flavor ; productive ; succeeds well on the quince ; should be in every orchard. Stands at the head of the list for export to Britain. D. and S. October to January.

Comice, (*Doyenne du Comice*)—One of the best shipping pears, a long keeper and very fine quality ; luscious, rich, and slightly aromatic, yellow, faintly blushed crimson.

***Duchess D'Angouleme**—Very large, dull greenish, yellow, streaked and spotted with russet ; flesh white, texture rather granular, with a rich and very excellent flavor. However, on young standard trees the fruit is variable, but as a dwarf this variety is always fine, in fact is planted as a dwarf more extensively than all other sorts combined, and is very valuable for export. D. and S. October and November.

Dempsey—Large, obtuse, pyriform, irregular in outline. Skin smooth, green, changing to yellow when ripe, with a slight brown tinge where exposed to the sun. Flesh white, fine grained, tender, buttery, almost melting, with a rich, sweet, delicious flavor. Tree an upright grower. Season October and November. D. and S.

***Flemish Beauty**—Large, symmetrical, beautiful, juicy, melting, rich and fine ; in unfavorable seasons scabs freely unless sprayed. Very heavy bearer, hardiest of all pears of good quality. D. and S. September and October.

Howell—Large, light, waxen yellow, with a fine red cheek ; handsome, rich, sweet, melting, perfumed, aromatic flavor. An early and profuse bearer. Very hardy and valuable. Is one of the best for export. September and October. S. and D.

Hardy Beurre—A large pear ; cinnamon russet and shaded red ; melting, buttery, juicy and vinous. One of the best Autumn pears. Tree a strong grower and productive.

Idaho—Size very large ; form nearly round, resembling Eastern Beurre ; skin greenish yellow, brownish red on the sunny side, with a surface like that of Duchess, flesh melting, juicy, slightly vinous, quality fair. Blights badly. October. D. and S.

***Kieffer's Hybrid**—Raised from the seed of the Chinese Sand Pear, accidentally crossed with the Bartlett or some other kind grown near it. Tree has large, dark green, glossy leaves, and is of itself very ornamental ; is an early and very prolific bearer. The fruit is wonderfully showy and valuable for market, but not good for table use. Can ship it to Britain without cold storage. It never rots at the core and is nearest blight proof of any pear. S. November and December.

Louise Bonne De Jersey—Rather large, greenish yellow, with a bright red cheek; juicy, buttery and melting; excellent; very productive. One of the best pears for either home use or market, especially as a dwarf. D. and S. Season September and October.

Sheldon—Medium size; yellow russet; with a richly shaded cheek; flesh melting, juicy, with a very brisk, vinous, perfumed flavor; productive. A choice pear for home use or market. S. October.

Seckel—Small; skin rich yellowish russety brown when fully ripe, with deep brownish red cheek; flesh very fine grained, sweet, exceedingly juicy, melting, buttery; the richest and highest flavored pear known. Tree a stout, slow, erect and symmetrical grower. Very productive and hardy. D. and S. September and October.

Vermont Beauty—A beautiful new seedling pear that originated in northern Vermont. Fruit of medium size; flesh melting, sprightly and of the best quality; tree healthy, hardy and very productive. October. S. and D.

WINTER VARIETIES

Easter Beurre—A large, roundish oval fruit, yellow, with a red cheek; melting and rich. Tree a moderate grower and most abundant bearer; best on the quince as a dwarf. Keeps all winter. D. and S.

Lawrence—Medium size, yellow, covered with brown dots; flesh whitish, slightly granular, somewhat buttery, with a very rich aromatic flavor; unsurpassed among the early winter pears; succeeds well on the quince; ripens with little care; should be in every orchard; tree healthy, hardy and productive. November [and December. D. and S.

Lincoln Coreless—Storrs & Harrison say of this pear: Fruit is all solid meat, usually no core or seeds, very large, sometimes weighing over a pound. High colored and handsome; flesh rich, yellow, juicy, aromatic. Season December to March S.

President Drouard—Fruit large and handsome; greenish yellow, red in the sun; melting, juicy, with a delicious perfume. Tree blights badly. March to May. S.

Vicar (*Le Oure*)—Large, long; not first quality, but desirable for its productiveness. Best on quince; a very long keeper; tree blights badly. November to January. D. and S.

Winter Nelis—Medium size, yellowish-green and russet; fine grain, melting, rich and delicious, one of the best winter pears, very productive. Growth moderate and spiny, has to be topworked. December. S.

PLUMS

The plum, like the pear, attains its greatest perfection on our heavy soil, being then most free from disease. There is no country where plums thrive better than in Canada, especially near the various lakes and bays that are around the southern part.

When a plum is described as "very hardy" it will bear at Ottawa or similarly cold parts of Canada, with reasonable regularity. When described as "hardy" it will bear along the northern limit of successful plum culture. Other sorts will bear in the plum belt.

***Abundance**—A very thrifty and beautiful tree ; early and profuse bearer of medium sized amber colored plums, turning on the sunny side to cherry red ; flesh yellow, and of excellent quality. Japan origin. Ripens August 12th to 15th.

America—New hybrid. Large size, color glossy coral red, very handsome ; flesh yellow and of excellent quality, ripens about the same time as Abundance, or a little earlier. Said to be an extra good shipper.

Beauty of Naples—A variety of the highest excellence ; size large, color greenish yellow, flesh juicy and fine flavored. Tree very strong grower and productive. September 7th to 10th.

***Bradshaw**—Fruit very large, dark violet red, flesh yellowish green, juicy and pleasant ; productive. One of the best. August 25th to 30th.

***Burbank**—Of the many varieties introduced from Japan, the Burbank is one of the very best. The tree is universally vigorous, and has strong branches, and begins to bear, usually, when two years old. The skin of the fruit is thick, and is almost curculio-proof. An admirable shipping variety ; ripens early, enormously productive. August 23rd to 27th. Tree hardy.

Chabot—Fruit roundish to medium heart shaped ; color deep dull red, with numerous small yellow dots ; skin somewhat thick ; flesh yellow and juicy ; firm and sweet. Quality good. Season late. Tree a strong grower and good bearer. One of the best Japanese varieties.

Climax—Very large, deep dark red ; firm flesh, yellow, sweet and rich ; quality first rate. Season earlier than Abundance. Regarded by Mr. Burbank as one of the most valuable of his numerous introductions.

Coe's Golden Drop—Very large and handsome, light yellow, firm, rather coarse quality, one of the most profitable late plums ; enormously productive, tree not a very strong grower, requires rich soil. September 20th to 25th.

De Sota (*Americana Species*)—Extremely hardy ; medium size, yellow with red cheek, quality fair, very productive, tree vigorous. Season medium.

Duane's Purple—Large and handsome ; oval ; reddish-purple ; flesh juicy and sweet ; adheres to the stone. Tree moderate grower and very productive. September.

Fellemborg (*French or Italian Prune*)—Oval ; purple ; flesh juicy and delicious ; parts from stone ; fine for drying. Tree a free grower and very productive. September.

General Hand—Very large ; yellow, handsome ; parts freely from the stone. Tree stocky, vigorous and productive. September.

German Prune—Medium ; oval ; purple or blue ; rich, juicy, fine. Tree vigorous and very productive. September.

***Glass Seedling**—Fruit large, ovate ; suture large and broad, one side often enlarged ; stock of medium strength, slender ; cavity large ; skin dark purple, almost black, with a thin blue bloom ; flesh greenish yellow, a little coarse, moderately juicy, sweet, good ; separates freely from the stone. Ripens in September.

Grand Duke (*New*)—A valuable addition to late plums ; as large as the Bradshaw, of same color, and ripening latter part of September. Entirely free from rot.

Green Gage—Small, but of the highest excellence. Tree a moderate grower. Should be top-grafted to get good trees. September.

Guii—Fruit very large ; deep bluish-purple, covered with thick bloom ; flesh yellowish-green, coarse, sweet and pleasant ; great bearer and very early. Tree a hardy and rapid grower. Valuable for market. September.

Hale—This is the result of a cross between Kelsey and Satsuma. Handsome, red and speckled, parting easily from the stem ; soft, juicy and of good quality ; peachy flavor. Ripe from 10th to 15th of September. Tree a good bearer and fruit of large size. One of the most promising of the new plums.

Hawkeye (*American Species*)—Very hardy and one of the best of this class, fruit medium size, color red, quality fair ; very productive. Season medium to late.

***Imperial Gage**—Rather large ; oval ; greenish ; flesh juicy, rich and delicious ; parts from the stone. Tree a vigorous grower, very productive and one of the best of plums. Middle of August.

Lincoln—A seedling of Green Gage, very large, reddish purple in color on a green ground. Season medium. My trees ten years old have not proved productive, so far.

***Lombard**—Medium size ; oval, violet red ; flesh yellow, juicy and pleasant. Tree very vigorous, a great bearer, and peculiarly well adapted to light soils. September.

***Monarch**—The largest size, even larger than Grand Duke ; brilliant bluish-purple. Free from rot and disease and of extra good quality. Last of September.

Monroe—Tree very vigorous and healthy ; bears abundantly ; medium size ; greenish-yellow ; flesh firm, rich and sweet. September.

Moore's Arctic—Medium ; skin purplish-black, with a thin blue bloom ; flesh greenish-yellow, juicy, sweet and pleasant flavor ; claimed to be the hardiest plum grown and free from black knot. Tree healthy, vigorous ; an early and abundant bearer.

Niagara—Same as Bradshaw.

October Purple—This sum was originated by Burbank, who regards it as one of the best ever introduced. Fruits every season on the old wood and frequently measures over seven inches in circumference. Flesh yellow and of superb quality ; stone small. Tree a strong, erect grower, forming a shapely head. September.

Ogon—Above medium, round, clear lemon-yellow, with light bloom ; flesh meaty and firm ; a long keeper ; excellent for canning ; freestone. Early.

Pond's Seedling (*Hungarian Prune*)—A magnificent English plum ; light red, changing to violet ; flesh rather coarse. Tree a vigorous grower and most abundant bearer. One of the most attractive in cultivation. September.

Pottawattamie—Yellow, overspread with bright pink and prominent white dots ; flesh yellow, luscious, good. Tree hardy, early and an annual bearer.

Prunus Simoni—(*Apricot Plum*)—A distinct species from China. Growth erect, flowers small, white, appearing early in spring ; fruit large, flattened, of the size and appearance of a Nectarine, and of a brick red color ; flesh yellow, with a peculiar aromatic flavor.

***Quackenboss**—A popular Hudson River variety ; large deep purple ; flesh greenish-yellow, juicy and sweet, with a sprightly flavor ; good. September.

***Red June**—For market value, Red June is, perhaps, unequalled among Japanese plums. Ripens two weeks earlier than Abundance, equals Lombard in quality, of larger size ; color deep vermilion red. Pre-eminent among plums for its freedom from rot, due, no doubt, to its ripening before the plum rot begins.

***Reine Claude de Bavay** (*Bavay's Green Gage*)—One of the best foreign varieties. As large as the Washington and of fine flavor ; roundish-oval ; greenish, marked with red in the sun. Tree a free grower and remarkably productive. Middle to end of September. Hangs long on the tree.

***Satsuma**—One of the celebrated Japanese plums. Fruit large ; color reddish-purple, with blue bloom ; flesh blood color ; quality fine ; pit remarkably small. Perfectly hardy and a vigorous grower. September.

***Shipper's Pride**—Originated in New York. An unusually thrifty grower, and stands our coldest winters. Very productive ; fruit of large size and nearly round ; color handsome dark purple ; quality fine, juicy and sweet ; excellent for canning and an unusually good shipper. A splendid market plum. September.

***Shiro**—Tree a strong grower ; wood very hard and wiry. The fruit which is produced in great profusion, is large, uniform in size, clear light yellow, and so transparent that the pit can be seen through the flesh, which is firm yet juicy ; rich, pleasant sub-acid ; clingstone. Will keep in good condition for a month. September.

Shropshire Damson (or *Prune Damson*)—An English variety of great merit for preserving. Large, and much more desirable than the common Damson. Tree a vigorous grower, very free from attacks of curculio ; hardy and abundant bearer. October.

Smith's Orleans—Very large ; reddish purple ; flesh yellow, firm and juicy, with a rich brisk, vinous flavor. Grows well and bears abundantly ; very fine. Last of August.

Stoddard—A plum that does well almost everywhere ; one of the best and most reliable. Fruit oblique oval ; color pinkish red over yellow, and covered with many small white dots ; skin thick ; flesh yellow ; stone medium large, round, flattened and a cling ; quality good ; season medium early.

Tatge—Evidently a seedling of the Lombard. Is larger, more nearly round, darker color and finer quality than that well-known and excellent variety. Claimed to be the hardiest, most productive and longest lived plum known.

Washington—Very large, when ripe clear yellow, marked with red ; flesh firm, very juicy and excellent ; very popular and very productive. August 30th to September 5th.

Willard (*Japan*)—Quality poor, color dark red, size medium ; productive ; when ripe drops easily from the tree. Season very early—about a week before Abundance, or August 7th to 10th. Not to be recommended very highly, however.

Wickson—Another of the new Japanese sorts. Tree upright and vigorous ; fruit of very large size, often 8 or 9 inches round ; when ripe is a deep crimson color when fully exposed to the sun, yellow over the balance of the plum ; quality excellent ; blooms very early and so may more likely, even than the other Japans, be caught occasionally in some sections by late spring frosts. Season follows Burbank. Not hardy.

Wolf (*Americana Species*)—Very hardy and a valuable plum for the extreme north ; rather above medium size, form round oval, color red, quality below medium ; very productive. Season medium.

***Yellow Egg, or Yellow Magnum Bonum**—Very large, egg shaped, excellent for cooking, good and productive. One of the most profitable market plums on account of large size and productiveness. Hardy. September 10th to 15th.

Yellow Gage (*Prince's Yellow Gage*)—Fruit large, oval ; skin golden-yellow ; flesh deep yellow, rich, sugary and melting. Tree very vigorous and productive August.

QUINCES

The Quince is generally well known and highly esteemed for cooking and preserving. It thrives best in a deep, rich soil, and is benefited by a clean, high cultivation. It is said to be improved by the application of salt in small quantities. The Quince is usually sold at the age of two or three years, and is from three to four feet in height.

VALUE FOR MARKET

The fruit is very profitable, as it requires but little space, and is very productive. Planted at ten feet apart each way, we have 430 trees per acre. A low estimate of the yield of an acre of quinces would be 200 to 250 bushels, which at a very low price would bring more than \$500.

***Apple or Orange**—Large; bright golden-yellow. One of the best and most desirable quinces in cultivation.

Champion—Fruit very large, fair and handsome. Tree very productive; bears abundantly while young. Scarcely hardy enough north of Hamilton.

Meech's Prolific—A valuable quince, remarkable for its early and regular bearing and great productiveness. The fruit is of good size and form, and bright orange-yellow; flesh very fragrant, delicious and tender. Unsurpassed for cooking.

Rea's (*Rea's Mammoth*)—We consider this the best of all the quinces. The largest and in every respect the finest variety of the quince. A strong grower and very productive.

GRAPES

Nearly every section of Ontario can produce grapes of good quality, but more particularly the counties bordering the lakes. We have now grand varieties ripening early enough to suit the northern counties, and hardy enough to stand 30 degrees below zero when the wood is well-ripened. However, any difficulty about the wood freezing in the winter can easily be overcome by laying down the vines in winter and covering with earth. The soil best suited for a vigorous and at the same time healthy vine is not deep sand, as was at one time supposed, but on the contrary rather heavy clay loam that is moderately fertile and deep. A strong, deep soil well drained, such as would produce a heavy crop of winter wheat, will produce the best results. The vine does not require heavy dressings of manure on suitable soil; a moderate dressing of cow manure is best when the vines begin to show a lack of vigor. Ashes are beneficial on most soils, but especially on light leach soils. Vines, when planted, should have the top removed down to two buds and the following spring down to three buds, and the third spring to one cane from 2 to 4 feet long, according to the vigor of the vine and the closeness of the buds, say from 6 to 10 buds. This cane should be tied upright to a trellis, and, when the shoots start out, all below a foot from the ground rubbed off, and the stock to this height always kept clean of suckers as fast as they start. The following spring three canes can be left, each having from 4 to 8 buds, according to the vigor of the vine. These are tied in fan shape on the trellis. The fifth spring the vine should be strong enough to bear a full crop and 5 to 8 canes can be left, having from 4 to 8 buds on each, and this quantity each succeeding year, always bearing mind the more buds the more bunches, and that a full grown vine should not bear over 20 lbs. of grapes under ordinary circumstances. Each bud on a thrifty Concord should produce a half pound of grapes on an average. We would recommend the following varieties for family use for a good grape section: Moore's Early, Worden, Concord, Roger 4 (Wilder), Campbell's Early, Brighton, Lindley, Agawam, Vergennes, Niagara, Moore's Diamond; for northern sections, where only early sorts will ripen, Moore's Early, Worden, Campbell's Early, Brighton, Lindley and Moore's Diamond.

Training Vines—There are many methods of training grape vines, but as trellises are more generally employed, we will confine our suggestions to a description of the trellis method. To construct a trellis take posts of oak, cedar or chestnut, 8 to 10 feet long ; set them 3 feet in the ground and about 12 feet apart. Stretch No. 9 galvanized wire tightly along the posts, and fasten them to each. Let the first wire be 18 inches from the ground, and the distance between the wires about 12 inches. Wooden slats about 1 x 2 inches may be substituted for wires. Trellises should be at least 10 feet apart ; a greater distance is preferable. Set the vines about 10 feet apart. Prune the vines to two canes each for two years after they are planted. In February or March these canes should be cut back to 5 or 6 feet each, and tied along the lower wire or slat of the trellis, horizontally.

When the growth commences in spring, the young shoots must be reduced by disbudding, so that they may stand about a foot apart on the cane, selecting, of course, strong, healthy shoots ; as they grow they are tied up to the second, third and fourth wire or slat, and all superfluous ones removed, as well as the young *laterals* which will appear on vigorous vines ; but the fruit-bearing shoots are allowed to extend themselves at will until September, when they may be pinched off at the ends to assist the ripening of the wood.

Gathering and Keeping—Grapes for keeping to be used in their fresh state should be allowed to remain upon the vines until perfectly matured, but not much longer. Pick them when perfectly dry. Let them stand in open baskets or boxes for about ten days, in a cool, dry room, and after sorting out all decayed or imperfect or elm boxes, if convenient. Pine and other resinous woods should not be used, as they flavor the fruit disagreeably. After packing, keep the boxes where it is both cool and dry. Under careful management some varieties may be kept until spring.

CLASS I.—BLACK GRAPES

Barry (*Rogers' No. 43*)—Bunch large but rather short ; berries large, roundish, much like Black Hamburg ; delicate, sweet and tender. Ripens with the Concord. Vine vigorous and productive. One of the largest and finest of the Rogers' Hybrid.

***Campbell's Early**—Clusters large and handsome ; berries large, round, black, with purplish bloom ; flesh firm but tender ; seeds few and easily separated from the pulp ; flavor, rich, sweet and slightly vinous. A strong and vigorous grower and ripens its fruit early. Berries do not drop from the clusters, and fruit keeps a long time in perfection.

Champion—A large grape of medium quality ; a strong grower and very hardy ; the earliest of all ; succeeds in all sections and makes a valuable market grape.

Clinton—Bunches small and very compact ; berries small with sprightly flavor ; when thoroughly ripe is a good table grape and keeps well.

***Concord**—A popular variety that succeeds under a greater variety of circumstances than perhaps any other grape ; universally healthy, vigorous and productive ; flesh somewhat buttery, moderately juicy and sweet. Bunch large, nearly black, with bloom—early.

Eaton—Bunch very large, weighing 12 to 20 ounces ; compact, often double shouldered ; berries very large, many one inch in diameter ; round, black, covered with a heavy blue bloom ; adheres firmly to the stem. Skin thin, but tough ; pulp tender, dissolving readily in the mouth. Very juicy ; good as Concord, with much less of the native odor. Ripens with Concord or a little earlier.

Hartford Prolific—Bunches rather large ; berries large, globular ; color almost black, covered with a beautiful bloom ; of fair quality ; ripens three weeks before the Isabella ; valuable for its abundant bearing and early maturity.

Isabella—An old, standard sort, highly prized where it will thoroughly mature. Bunches long, large, loose ; berries large, oval, sweet and musky ; a good keeper.

McPike—Originated by Judge McPike, of Mt. Lookout Park, Alton, Ill. A seedling of Worden, with all its good qualities, but larger in size, berries often measuring over three inches in circumference. Considered by many as the best grape grown.

Merrimac (*Rogers' 19*)—Bunch medium to large ; berry large, sweet, and rich ; vigorous and productive. One of the earliest and best of the Rogers' sorts.

***Moore's Early**—Bunch large, berry round ; color black, with a heavy blue bloom ; quality better than the Concord. Vine exceedingly hardy ; has been exposed to a temperature of more than 20 degrees below zero without injury, and is entirely exempt from mildew or disease. Its earliness makes it desirable for an early crop, maturing as it does ten days before the Hartford, and twenty before the Concord.

***Wildcr** (*Rogers' No. 4*)—Bunch very large ; berry large, round, black ; flesh tender, juicy, sweet. Ripens about with Concord ; vine vigorous, hardy, and a good bearer. Regarded as one of the best of the black varieties, and on account of its size and beauty is very valuable for market.

***Worden**—Said to be a seedling of the Concord. Bunch large, compact, handsome ; berries large, larger than those of the Concord. It ripens a few days earlier, and is superior to it in flavor. Very popular for vineyard and garden.

CLASS II.—RED GRAPES

***Agawam** (*Rogers' No. 15*)—Bunches large ; berries large ; round ; color dark, red or maroon ; flesh quite tender, juicy, vinous ; vine vigorous and productive. Not suited to the extreme north.

Brighton—A superior family grape. Its remarkable vigor and hardness of vine, large, compact bunches, rich wine shade of the ripened berry, delicate skin, tender, almost seedless pulp, sugary juice and rich flavor, are combined qualities that are not united in such a degree in any other sort. It ripens a week or ten days before the Delaware, and bears most abundantly. Especially commended as a standard variety for the vineyard or garden.

Catawba—Well known as the great wine grape of Ohio, Kentucky, etc. Bunches large and loose ; berries large, of a coppery-red color, becoming purplish when well ripened ; two weeks later than Isabella ; requires the most favorable soils and situations, good culture and warm seasons to mature perfectly.

***Delaware**—One of the finest grapes. Bunches small, compact, shouldered ; berries rather small, round ; skin thin, light red ; flesh very juicy, with an exceedingly sweet and delicious flavor ; vine moderately vigorous ; hardy, and productive. Ripens two weeks before the Isabella.

***Lindley** (*Rogers' No. 9*)—Bunch, medium, somewhat loose ; berry medium to large ; round ; color a rich shade of red, rendering it a very handsome and attractive grape ; flesh tender, sweet, with a rich, aromatic flavor ; ripens soon after the Delaware ; vine vigorous and productive.

Moyer—A new grape originating in Canada. In habit of growth and hardness it resembles the Delaware very much, but ripens earlier. Flavor sweet, delicious ; skin tough but thin ; pulp tender and juicy. Berry and bunch small. Free from rot and mildew.

Salem (*Rogers' No. 53*)—Bunch large and compact ; berry large, of a light chestnut or Catawba color, thick skinned, perfectly free from hard pulp ; very sweet and sprightly, with a most exquisite aromatic flavor ; as early as the Delaware.

***Vergennes**—Very productive ; clusters large ; berries large, holding firmly to the stem ; color light amber ; flavor rich and delicious ; flesh meaty and tender. Ripens with Concord and is an excellent late keeper.

Woodruff Red—A large, handsome red grape, of medium quality. Vigorous, hardy and prolific. Esteemed as a market grape.

Wyoming—An extra early red grape, resembling the Delaware in appearance, but double its size and ten days earlier. Bunch compact and handsome ; berry medium, bright red ; skin thin and firm ; flesh white. A valuable market grape.

CLASS III.—WHITE GRAPES

Green Mountain (Winchell)—New. Found growing in a garden on the side of the Green Mountains in Vermont, at an altitude of 1,400 feet, where it ripened its fruit perfectly. Vine strong, vigorous, healthy, very hardy and productive. Bunch long, compact shouldered. Color green or greenish white ; skin thin ; pulp exceedingly tender and sweet. Very early, being three weeks earlier than Concord.

***Moore's Diamond**—Vine a vigorous grower, with dark healthy foliage, entirely free from mildew. A prolific bearer ; bunches large, handsome and compact, slightly shouldered ; color delicate, greenish white, with rich, yellow tinge when fully ripe. Skin smooth and free from specks ; pulp tender, juicy and nearly transparent, with very few seeds. Berry about the size of Concord, rich, sprightly and sweet. Ripens about one week before Concord.

***Niagara**—The vine is a strong grower and very hardy. Bunches very large and uniform and very compact ; berries larger than Concord, and skin thin but tough, which insures their shipping qualities ; quality good, very little pulp, melting and sweet to the center ; ripens before Concord.

Pocklington—Bunch large ; berry large, round, of a rich yellow color ; flesh pulpy, juicy and of good quality ; ripens at the time of the Concord. Vines vigorous, healthy, very hardy and productive. Quality good. Niagara much better.

BLACKBERRIES

This excellent and profitable fruit should be planted for garden use in rows five feet apart, with plants three feet apart in rows ; for market, in rows six feet apart, with plants three feet apart in the rows. Give the plants the same cultivation as for raspberries. May be planted either Fall or Spring.

Ancient Briton—Medium size ; melting ; without core. Bush hardy, and very prolific. One of the very best old sorts.

Blower—Originated in the celebrated small fruit belt of Chautauqua County, N.Y., where it has been thoroughly tested for several seasons. Claimed to be the hardiest, most productive, the finest quality and to bring on the market the highest price of all blackberries. Has produced 2694 berries on one bush. 2720 quarts on 1-3 acre. Large size, jet black, good shipper, best quality, unexcelled productiveness are the main characteristics of this splendid new sort.

***Eldorado**—A new seedling from Ohio, claimed to be the best all-round berry yet produced, combining nearly all the good qualities found in a blackberry.

Erie—A variety from Northern Ohio ; plants vigorous ; berry large, round ; good quality. Early and productive. An excellent market sort.

Gainor—Originated in Canada, and valuable for its extreme hardiness. Berries large and good.

Iceberg Blackberry—This remarkable berry was originated by Luther Burbank. The fruit is not only white, but so transparent that the seeds, which are unusually small, can be seen in the ripe berry. Is quite up to the average in hardiness and productiveness. Sweet and melting. A great novelty.

Kittatinny—Large, black, sweet; soft when black; very hardy; ripens up gradually like the Lawton. One of the best.

Lawton—Very large, excellent quality and an abundant bearer.

Lucretia (Dewberry)—A trailing form of the blackberry with large, beautiful, luscious fruit. It matures in advance of the ordinary varieties.

Mercereau—A new berry of sterling qualities, which will doubtless become very popular, as it becomes better known. Large size, good quality, hardy and productive.

Minnewaska—The new coreless blackberry; very early, hardy and productive. Highly recommended.

Rathbun—Berry exceedingly large, sweet and luscious, without hard core; jet black. Does not sucker but roots at the tips like the black raspberry; hardy and prolific. The finest blackberry known.

Snyder—Extremely hardy; enormously productive; medium size; no hard sour core; half as many thorns as Lawton or Kittatinny.

Taylor's Prolific—A new variety of the greatest value. It is so extremely hardy as to have stood 30 degrees below zero unharmed. Berries large and of the highest quality. Canes of strong, spreading growth, and productive.

Wachusett Thornless—Of fair size and quality; canes hardy and of healthy growth. It is almost free from thorns and fairly productive.

Wilson's Early—Very large size, oblong oval, black, quite firm, rich, sweet and good. Ripens early and matures its fruit rapidly; retains its color well after picking.

CURRANTS

This fruit comes partly with the raspberry, but follows it several weeks. Indeed, none of the small fruits will remain so long upon the bushes without injury as the currant. Set 4 1-2 to 5 feet apart in rich ground, rows six feet apart; in large plots plant five feet each way and cultivate both ways with horse. Cultivate well or mulch heavily, prune out old wood so that each remaining shoot will have room to grow; if the currant worm appears dust with hellebore every three weeks; manure freely. The best soil for currants is a heavy loam, and no fruit crop is more easily handled. Unlike strawberries or raspberries, you can let them hang when ripe for a few days without loss.

***Black Champion**—A new variety from England, more productive and fruit larger than Black Naples; season later than most sorts and hangs on extremely well; very profitable.

***Black Naples**—The old reliable standard black currant, vigorous, productive, best on heavy soil.

***Black Victoria**—An introduction from England. Berry of immense size, like small cherries; very productive bush and a vigorous grower; season about with or a little before Black Champion.

Boskoop Giant—An exceptionally fine currant of recent introduction from Holland. Berries larger than most black varieties; productive, and a vigorous grower. Season about with Champion.

***Cherry (Red)**—Old and reliable, largest red currant except Fay's, which is about the same size.

Comet—An English variety highly praised as being very large in bunch and berry, color brilliant crimson, flavor mild and pleasant.

Fay's Prolific (Red)—Has been cultivated for some years alongside all the best and most popular old varieties and has sustained all claims made for it by the originator, being as large as Cherry, berries more uniform, with larger stems and fruit less acid and far more productive; is the most popular red both for home use and for market.

Lee's Prolific (Black)—A variety not quite so vigorous as Black Naples, but more suitable for sandy loam, fruit sweeter and generally better liked for jam or jelly.

North Star (Red)—Originated in the Northwest. Bush a vigorous grower and very hardy.

Pomona—Good size, bright red in color, and has very few seeds; early bearer; very sweet, and hangs long time after ripening; bush a hardy and vigorous grower.

Prince Albert—Berry large, light red, bunch long, erect grower, immense bearer, ripens late; valuable.

Perfection—A cross between Fay's and White Grape. Berry very large, clusters longer, color beautiful bright red, a great bearer, ripens with Fay's. Was awarded the Barry Gold Medal of the Western New York Horticultural Society for a fruit of superior merit.

Red Cross—A new red currant of large size and superior quality; exceedingly vigorous and productive, with long fruit stems.

Red Dutch—An old well known sort. Medium size, good quality and very productive.

Victoria (Red)—A splendid variety, ripening two or three weeks later than the others, and continuing in fine condition for a long period. Bunches extremely long; berries of medium size; brilliant red and of the highest quality.

***White Grape**—Very large; yellowish white; sweet, or very mild acid; excellent quality and valuable for the table. The finest of the white sorts. Very distinct from White Dutch, having a low, spreading habit, and dark green foliage. Very productive.

White Imperial—New and of great value; fruit larger and stems longer than White Grape; enormously productive; quality mild, delicious, sub-acid.

Wilder—A remarkable new variety for which is predicted a great future both for table and market; strong grower; enormously productive; bunch and berry very large, bright red and highest sub-acid quality.

GOOSEBERRIES

This fruit requires the same cultivation as the currant, heavy soil most suitable. A good method to prevent mildew is to mulch deeply, six or more inches with straw, tan bark, coal ashes, etc. Plantations thus treated have borne large crops for twenty years. The mulch retains moisture in the driest weather, the few weeds that push up are easily pulled, and the fruit is large and more evenly ripened. In mulching be sure the ground is underdrained, or it is worse than useless. Good cultivation is better than half mulching. Put it on thick. In a dry season the extra amount of fruit will doubly pay for the material used, not to speak of the saving of labor and cleanliness of the fruit. The demand is yearly increasing. The American varieties are very little subject to mildew. Do not dig deeply about the bushes when fruit is setting, shallow cultivation is better.

ENGLISH VARIETIES

The number of varieties of English Gooseberries is almost innumerable. The fruit is generally large and handsome. Among the best sorts are Industry, Crown Bob (*red*), Keepsake and White Smith (*greenish white*), which in favorable localities do extremely well.

Crown Bob—Fruit large, oblong, hairy, flavor first-class.

Industry—It is of vigorous, upright growth, larger cropper than any other known variety, one of the best for market purposes owing to the properties it possesses of flowering late and afterwards swelling so quickly as to reach a suitable size for pulling green sooner than any other variety; if left to attain maturity it is a dark red color, hairy, with pleasant, rich flavor.

Keepsake—Very large, straw colored, excellent flavor. Can pull very early for green gooseberries.

***White Smith**—Fruit large to very large, oblong, flavor good; productive, fairly vigorous. One of the best.

AMERICAN VARIETIES

***Downing**—Origin, Newburg, N. Y.; fruit large, roundish, light green, with distinct veins, skin smooth, flesh rather soft, juicy and very good, vigorous and productive. Twelve berries weigh 1 2-3 ounces.

Golden Prolific—A fine large variety, golden in color when ripe and very desirable.

Houghton's Seedling—A small sized American variety, bears abundant and regular crops, seldom mildews; fruit smooth, red, tender and very good.

***Josselyn (*Red Jacket*)**—Fruit almost round, red, larger than Pearl or Downing; very vigorous grower, which is a desirable trait; does not mildew; is productive.

***Pearl**—An exceedingly productive variety, of good size and quality; in my opinion bound to supersede Houghton, Downing and Smith's Improved, being as free from mildew as any, as productive as Houghton and larger than Downing. Twelve berries weigh 1 3-4 ounces.

Smith's Improved—Large, oval, light green, with bloom; flesh moderately firm sweet good; vigorous grower.

RASPBERRIES

As it is difficult to eradicate clover or grass from Red Raspberries, we find the best preparation of the ground is a summer fallow, manured as for a crop of fall wheat and ridged up in the fall, ridges six feet apart. The ground must be well drained for raspberries. In the spring, harrow and cultivate centre of the ridges, only as fast as planted, so ground will not get dry, stretch out roots both ways in the furrows, plant about six inches below the level of the land, allowing for ridges. Put plants about 18 inches apart in the rows. Pack fine moist earth about young growth at two feet high. Second year cultivate as before, allow a cane every six inches in the row, cut the rest off same as weeds. Another plan, producing berries of larger size and with less labor, is to plant five feet apart each way and cultivate both ways permanently, leaving about four to six shoots in a hill. Where large plots are set we think this the better system, as it involves less hand labor and produces a better grade of fruit, and more of it. The soil for raspberries is sandy loam.

CLASS I.—RED AND YELLOW VARIETIES

***Columbian**—A vigorous grower; canes often ten to fifteen feet in length and over an inch in diameter. Never suckers from the roots. Very hardy, enduring 28 degrees below zero. Fruit very large, dark red; bordering on purple; adheres firmly; rich, sprightly flavor; the best for canning and evaporating, and one of the most productive.

***Cuthbert** (*Queen of the Market*)—Large, conical; deep, rich crimson; firm; of excellent quality. A vigorous grower, entirely hardy, and immensely productive.

Golden Queen—Rich golden yellow. The flavor is of the highest quality, pronounced by some superior to Brinckle's Orange. In size equal to Cuthbert; immensely productive; a very strong grower and hardy enough even for extreme northern latitudes.

***Herbert**—A seedling introduced by R. B. Whyte, Ottawa. Strong grower, hardy and very productive. Fruit large to very large, bright deep red; berries moderately firm, sweet and sub-acid, juicy and of good flavor; quality very good. Season before Cuthbert. Has all good qualities of a first-class berry being hardy, vigorous and productive, with fruit of good size and color, and extra good quality.

Loudon—Canes strong and hardy and wonderfully productive. Berries large, beautiful and of fine quality. Very desirable for home or market.

***St. Regis**—The only real overbearing raspberry. Will fruit the same as planted. Ripens a few days ahead of Cuthbert when a heavy crop can be gathered, then it continues to bear right through the summer until October.

***Shaffer's Colossal**—Fruit large, purple, soft, with a sprightly sub-acid flavor; plant very vigorous, hardy and productive. Much esteemed in some localities. Season medium to late. Valuable for canning.

CLASS II.—BLACK CAPS

***Black Diamond**—A large handsome berry of great productiveness and splendid keeping and evaporating qualities. Sweet and excellent. One of the most profitable to grow.

Conrath—A very reliable early sort, especially valuable for evaporating.

Cumberland—Bush perfectly hardy; very productive; fruit enormous; quality unsurpassed. The great firmness of the berry makes it a splendid shipper; ripens just after the Palmer and before the Gregg. A great acquisition.

***Gregg**—Fruit very large, good quality, very meaty and firm, with heavy bloom; canes of very strong growth, needs rich soil and plenty of fertilizer to do well; very late, extending the season well into blackberry time. Not quite as hardy as we could wish.

Gault Perpetual—Fruit immense size; commences to ripen with Gregg, continuing two or three weeks longer, when fruit on young canes commence to ripen, continuing till frost. Young canes frequently produce clusters of 80 to 100 perfect berries.

Hilborn—Originated in Canada; large jet black, best quality; ripens nearly a week later than Souhegan and bears a long time.

Kansas—Jet black, firm and delicious; as large or larger than Gregg. The hardest black cap known, successfully withstanding the winters of Canada. A little later than Souhegan, and more prolific. One of the very best.

Ohio—A very strong growing hardy sort; fruit as large as Mammoth Cluster and more productive; valuable for market and much esteemed for drying.

Plum Farmer—Is now considered the best black cap on the market. One of the newest varieties.

Souhegan—A new variety commended very highly as a market sort by those who have grown it. Said to be enormously productive, perfectly hardy and free from disease of any kind.

STRAWBERRIES

(Those marked "P" have pistillate flowers and must be planted near perfect flowering kinds.)

First of the small fruits comes the beautiful and wholesome Strawberry, and the profits resulting from its wise cultivation will satisfy any reasonable expectation.

Plant in March, April, May, September or October, in good soil deeply worked and well manured with muck, leaf mould, wood ashes or bone dust. Set 15 inches apart in rows 3 feet apart for field culture, and 15 inches each way for garden culture, leaving a pathway at every third row. Keep runners cut and cultivate clean. Mulch late in the fall and uncover early in spring, drawing about the plants to keep fruit from coming in contact with the ground.

Beder Wood—Large, roundish-conical, bright scarlet, moderately firm, fair quality; vigorous and productive. A valuable early sort for home use or nearby market.

Bubach (P)—Fruit uniformly large and handsome; conical, bright scarlet, moderately firm and of fair quality. Valuable for home use and nearby market. Season early to medium.

Clyde—A new berry that is making a record wherever grown. Berries medium to large, firm, dark scarlet, and fine flavor. Season early to medium.

Gandy—The old reliable, very late berry; berries are regular, even size and firm. Commands a big price when other varieties are running out.

Haverland (P)—Large, long, bright red; a great yielder. One of the best of recent introductions.

Lovett—A business berry, doing well on all soils, from heavy clay to light sand. Large, uniform, bright crimson, good quality. A variety of merit.

Michel's Early—One of the first to ripen; berry medium to large, roundish, bright, crimson, firm, fair quality. Valuable on account of its earliness and productiveness.

Parker Earle—A splendid new berry, originating in Texas. Berries uniformly large, regular, conical. Color glossy scarlet crimson, ripening to the tip. No hollow core. Quality good. Flowers perfect and always setting in perfect fruit. Plant extremely vigorous, healthy and enormously productive. It has yielded 15,000 quarts per acre, and is beyond doubt the most valuable variety in existence.

Rough Rider—A seedling of Eureka fertilized by Gandy; enormously productive, hardy and free from disease. Berries very large, mostly round, but somewhat irregular, and of deep red color. The latest and best shipping berry known, bringing nearly double the price of other varieties. Blossoms perfect.

Ruby—Believed to be one of the best ever offered. Fruit large, somewhat irregular, and dark red clear through. Rich flavor, firm; abundant bearer. A fine keeper and shipper.

Sharpless—This grand old sort originated in Pennsylvania and has been planted everywhere with very satisfactory results. Fruit large size, showy and good. Season medium.

Splendid—A beauty, and quality unsurpassed by any berry that is firm enough to ship well.

Wilson's Albany—The old standard sort for preserving and canning. Vines subject to blight in some sections, otherwise a variety of great value.

MULBERRIES

The Mulberry is valuable both as an ornamental shade tree and for its fruit. It is of easy culture, requiring little or no pruning.

***Downing's Everbearing**—The beauty of this as a lawn or street tree is quite enough to commend it, but in addition it yields an abundant supply of its large refreshing berries for about three months. "I regard it as an indispensable addition to every fruit garden; I had rather have one tree of Downing's Everbearing Mulberry than a bed of strawberries."—Henry Ward Beecher.

New American—A sport from Downing and precisely like that well known sort, but decidedly hardier.

***Russian**—A hardy, rapid-growing tree, introduced from Russia by the Mennonites; foliage abundant; valuable for wind-break. Fruit of little value.

White—Mostly cultivated for silk and honey. Fruit small and very sweet.

ASPARAGUS

This earliest and finest of spring vegetables is among the earliest cultivated and most profitable. A bed once planted suffers no deterioration for thirty years or more, if it is properly attended to and well manured.

See that the ground is well drained, naturally or otherwise; work it up fine and deep and make it very rich with well rotted barn-yard manure. Place the plants eight inches apart in rows three feet apart. Spread out the roots in a trench made deep enough to permit their crowns to be covered with three or four inches of mellow earth. Give the bed liberal dressings of manure at intervals, and, except near the sea shore, three pounds of salt per square yard early every spring. Do not cut for use until the second season.

***Conover's Colossal**—This variety is much superior in size and quality to any of the old common sorts, being remarkably tender and fine flavored.

***Palmetto**—Until recently we believed that the Conover's Colossal was the best sort known, but we are now forced to concede that the Palmetto is earlier and a better yielder.

Mammoth White—Plant even more robust and vigorous and throws larger shoots, and fully as many of them, as Conover's Colossal or Palmetto, and the shoots remain white above ground as long as they are fit for cutting.

RHUBARB OR PIE PLANT

This deserves to be ranked among the best early products of the garden. It affords the earliest material for fine pies and fresh table sauce, continues long in use, and is valuable for canning. Make the ground rich and deep, as recommended for Asparagus. Plant four feet apart each way.

Early Scarlet—Smaller than Myatt's, but extremely early and very highest quality. The best extra early sort for home or market.

***Myatt's Linnaeus**—Those who have never grown this variety, which is of superior quality, will hardly recognize the old "Pie Plant." It is an early, tender variety without being in the least tough or stringy, with a mild sub-acid flavor.

NUTS

***Butternut (White Walnut)**—A rapid-growing native tree, producing edible nuts.

***Chestnut, American**—A well known forest and nut-bearing tree; of great value for ornamental purposes.

Gumbo—A New Jersey Seedling of the Spanish Chestnut, and claimed to be as hardy as the American.

Filbert, American—Smaller and with a thicker shell than the English, but of good flavor; hardy and productive.

Filbert, English—The fruit of this being so much larger and better flavored than our native species, gives it the preference for cultivation over the latter in localities where it will succeed.

Filbert, Kentish Cob—One of the largest and finest of Filberts; oblong, meaty, and of excellent quality.

***Hickory, Shell Bark**—To our taste, no other nut that grows, either foreign or native, is superior to this in quality; it possesses a peculiar rich, nutty flavor, excelled by none. The tree is of sturdy, lofty growth. The wood, on account of its great strength and elasticity, is highly prized for making agricultural implements and is unsurpassed for fuel.

Pecan—This is a native nut belonging to the (*Carya*) Hickory-nut family. The tree is of tall growth, and bears abundantly; not entirely hardy at the north but should be planted wherever it will succeed. The shell is very thin, the kernel sweet and delicious.

***Walnut, Black**—The well-known native species; hardy, prolific and valuable; timber in point of durability is difficult to excel.

Walnut, English (*Madeira Nut*)—This rich and fine-flavored nut is moderately hardy, and makes a vigorous growth. Well worthy of cultivation.

ORNAMENTAL DEPARTMENT

While most people appreciate well arranged and well kept grounds, large or small, many fail to realize that they too can have equally fine grounds. We frequently observe a few roses growing in thick turf, with no attention given to pruning or cultivating. Under such circumstances good results cannot be expected.

Aside from the pleasure of having fine trees, shrubs, vines and flowers in the grounds surrounding a home, few realize how much these add to the commercial value of the place. A purchaser having to decide between a house with bare and unkept grounds and one surrounded by fine ornamentals, invariably chooses the latter at a marked advance in price, because he sees that he will at once enjoy what it would otherwise take some years to secure. Sagacious men are led by a knowledge of these facts to plant fine trees and shrubs about vacant lots they are intending to put upon the market. Lots thus planted readily secure purchasers at good prices when bare grounds go begging for buyers.

HOW TO PLANT AND WHAT TO PLANT

Do not make the mistake of planting at random all over the grounds. A fine, well cut lawn is one of the handsomest features of a place. Trees may be planted along a lane or avenue leading to the house, or dotted about the lawn on lines radiating from the house. This will secure light and air with good views from the house. Upright shrubs and roses should be planted in beds, each class by itself, about the borders of the grounds. These beds should be well cultivated and the plants annually pruned. When the growth of the plants has made them very thick, some should

be taken out. It will not do to plant so little that years must elapse before a fine effect will be produced. A surplus should be planted at first and this gradually taken out. Vines should be planted near the house and allowed to climb upon and about it, or they may be trained on posts, arbors or stakes, placed in suitable location on the lawn.

Groups of flowering trees form superb objects at the blossoming season, and it is strange that planters do not employ them more.

Highly effective groups can be formed of trees and shrubs possessing bright-colored bark in winter.

For Lawns and Small Places—Whatever specimens are planted should be of the finest species, of moderate size, of graceful habits of growth and handsome foliage.

A pendulous tree or one with variegated foliage may be occasionally introduced, and will add to the beauty of the grounds. Depend mainly upon dwarf shrubs for small places, and in selecting, aim at securing a succession of bloom. Dwarf evergreens are very useful, and in small grounds, hardy herbaceous border plants can be used with the most satisfactory results; a proper selection will afford as much bloom as ordinary bedding plants, and at half the trouble and expense.

When to Plant—Deciduous Trees, Shrubs and Vines can be planted either in Spring or Fall. Spring is the best time for evergreens generally.

How to Plant—Preparation of the Roots—Cut off smoothly all bruised or broken roots up to the sound wood. This prevents their decaying and hastens the emission of new roots and fibres.

Preparation of the Top—This consists in cutting back the top and side branches in such a way as to correspond with the more or less mutilated roots as follows:

WHAT TO PLANT

A detailed list of desirable ornamental trees and shrubs would be little less than a recapitulation of our entire list, but as few have room for all, we here present a list of the most desirable in each class, and refer the reader to the proper places in catalogue for descriptions of them.

Flowering Trees—May—Magnolias in variety, Judas Tree, Horse Chestnuts, Double Flowering Cherry; Peach, Red and White; Cornus, Florida and Weeping, and Red Flg.; Tulip Tree. **June**—White Fringe, Laburnum, Mountain Ash, Thorns in variety, Lindens in variety. **July**—American Sweet Chestnut.

Cut-Leaved Trees—Cut-leaved Birch, Wier's Cut-leaved Maple.

Purple-Leaved Trees and Shrubs—Purple-Leaved Beech, Purple-leaved Berry, Purple-leaved Birch, Purple-leaved Elm, Purple-leaved Maple, Purple-leaved Oak.

Deciduous Upright Trees—Sugar, Norway and Sycamore Maples: European and Oak-leaved Mountain Ash, American Chestnut, Salisburia, Elm, European and White-leaved Lindens.

Variegated-Leaved Trees and Shrubs—Variegated-leaved Alder, Variegated-leaved Cornus, Variegated-leaved Deutzia, Variegated Honeysuckle, Variegated-leaved Weigelia.

Weeping Trees—Willow Kilmarnock, Birch, Cut-leaved Weeping, and Young's Weeping European Ash and Mountain Ash, Linden, Camperdown Elm, and Weeping Mulberry.

Upright Flowering Shrubs.—**April**—*Daphne Mezereum*. **May**—*Forsythia*, Double Flowering Plum, Azalias, Japan Quince, *Spiraea Prunifolia*, Lilacs in variety, Tartarian Honeysuckle, *Cornus Mascula Variegata*. **June**—*Deutzia Gracilia*, *Deutzia Crenata* flore Pleno, *Viburnum*, *Plicatum*, Snowball, *Weigela* in variety, White Fringe *Syringa*, Golden-leaved and Plain *Calycanthus* (at intervals through summer), *Exochorda Grandiflora*, *Spiraea Van Houtti*, *Spiraea* Golden-leaved, *Halesia*, Japan Globe Flower, Purple Fringe, *Deutzia Candidissima*. **July**—*Spiraea Collosa Alba*. **August and September**—*Altheas* in variety, *Hydrangea Paniculata Grandiflora*, *Anemone*.

Climbing and Trailing Shrubs.—*Clematis* in variety (flower from June to November), *Ampelopsis Veitchii*, American Ivy, Climbing Honeysuckle in variety (flower all summer), *Aristolochia Sypho* (flowers in May and June), *Bignonia* or Trumpet Vine, *Wistaria*.

Evergreens.—Among the shrubs are *Mahonia Aquifolia*, yellow blossoms; *Rhododendrons*, rose, purple and white color; Dwarf *Arbor Vitae*; Dwarf or Mountain Pine; hardy and fine colored.

The Norway Spruce and American *Arbor Vitae* are the best known of Evergreens. Either as single trees or in hedges they are indispensable. The black, White and Blue Spruce vary in shade of color as their names indicate. The White Pine, light and graceful in its foliage; the Scotch, angular, spreading, irregular, but finely colored, and the Austrian, erect, regular in growth, and bearing upright cones, are well known and desirable. The Balsam Fir is handsome, but loses its foliage—a fatal defect in an Evergreen. The Siberian *Arbor Vitae* is an improvement on the common American, for its strong, thick-leaved foliage. The Golden *Arbor Vitae* may also be added. The Irish and Swedish Junipers are compact cones of foliage (the latter in light color), and contrast finely with the round-topped trees.

Trees with branching heads, should have the small branches cut clean out, and the larger ones, intended for the frame work of the tree, cut back till within two or three buds of their base.

In case where there is an abundant root, and small top or few branches, the pruning need be very light, but where the roots are small and the top heavy, severe pruning will be necessary. These remarks are applicable to all Deciduous Trees and Shrubs. Evergreens seldom require pruning, but *Arbor Vitae* and other Evergreens planted in hedge rows may be advantageously shorn immediately after planting.

Pruning, as practised by some people, has the effect to render trees and shrubs unnatural and inelegant. We refer to the custom of shearing trees, particularly evergreens, into cones, pyramids and other unnatural shapes. Every tree, shrub and plant has a habit of growth peculiar to itself, and this very peculiarity is one of its beauties. If we prune all trees into regular shapes we destroy their identity. The pruning knife, therefore, should be used to assist nature, and handled with judgment and care; to lop off straggling branches, to thin the head of a tree which has become too dense, and to remove dead wood. Sometimes it becomes necessary to prune severely to keep a tree from attaining too great size.

Shearing may be practiced on hedges, but never on trees or shrubs.

Pruning Shrubs—Each shrub has peculiarities of habit and foliage, and we should aim to preserve them as far as possible. Judicious pruning to secure health and vigor is necessary, but trimming all kinds of shrubs into one form shows a lack of appreciation for natural beauty, to say the least. Weigelas, Deutzias, Forsythias and Mock Orange, flower on the wood of the preceding year's growth, hence these shrubs should not be pruned in winter or spring, but in June, after they have finished flowering, when the old wood should be shortened or cut out, thus promoting the growth of the young wood which is to flower the following season.

Spiraeas, Lilacs, Althaeas, and Honeysuckles may be trimmed during the winter or early in the spring, but the branches should only be reduced enough to keep them in good shape. The old growth should be occasionally thinned out and the suckers and root sprouts removed when they appear. The best time, however, for pruning all shrubs, is when they have done flowering. The *Hydrangea Paniculata Grandiflora* should be severely cut back and thinned early in the spring.

Pruning Evergreens—Use the knife occasionally to thicken the growth and preserve the shape. This can be done in April or May, just before the trees start to grow.

The weeping or drooping varieties will be found further on under heading "Weeping or Drooping Deciduous Trees."

In order that planters may be able to form an idea of the size which trees and shrubs attain at maturity, a point which should always be taken into consideration at the time of planting, so that the specimens may occupy the proper position, we have adopted letters to denote the proper classes, as follows:

- A. denotes trees which attain the largest size, 50 feet and upwards.
- B. " " " " " secondary size, 20 to 40 feet.
- C. " " " " " medium size, 9 to 15 feet.
- D. " " and shrubs which attain only small size, 1 to 8 feet.

UPRIGHT DECIDUOUS TREES

ALDER (*Alnus*)

European or Common (*Glutinosa*)—Rapid growing; when matured 30 to 60 feet high, especially adapted to moist situations. B.

- ASH (*Fraxinus*)

This family comprises many varieties of great value.

American Black (*Sambicifolia*)—A small medium sized tree, with fine foliage.

B.

European Flowering (*Ornus*)—Flowers greenish white, fringe-like, produced in June; grows from 20 to 30 feet. C.

***White** (*Alba*)—Our own noble native ash. B.

BEECH (*Fagus*)

European (*Sylvatica*)—A beautiful tree, growing to the height of 60 or 80 feet, A.

BIRCH (*Betula*)

Graceful and suitable for any lawn. Hardy and thrifty in all soils.

Canoe or Paper Birch (*Papyracea*)—This magnificent tree has gathered about it more poetic associations than any other native tree. A.

European White (*Alba*)—A fine tree of moderate size, with silvery bark and slender branches. A.

CATALPA

Bungei—A species from China, of dwarf habit, growing only from 3 to 5 feet high. Foliage large and glossy. C.

***Speciosa**—A variety originating in the West; more upright and symmetrical in its growth than the common Catalpa (*Syringaefolia*), and blossoms two or three weeks earlier. Very valuable for timber, fence posts, railroad ties, etc., possessing wonderful durability. A very ornamental and valuable tree. A.

CHERRY (*Cerasus)

Dwarf White-Flowering—(*Humilis fl. pl.*)—A variety of the Morello, with double white flowers. Both this and the succeeding are very ornamental. C.

***Large Double-Flowering** (*Flore alba pleno*)—A variety of the Heart Cherry, with pretty double flowers. B.

CHESTNUT (*Castanea*)

***Americana** (*American*)—A stately tree well known in many parts of Canada; produces small nuts, but of choice quality; a grove of these on suitable soil would yield a very large revenue; the soil requires to be loamy or sandy, and dry to a considerable depth to secure the best results. A.

Vesca (*Spanish*)—Originally from Asia Minor; a very handsome lawn tree; produces much larger fruit than the American, but not of so choice a quality. C.

Japonica (*Japan*)—Similar to Spanish, producing very large fruit also. C.

CRAB (*Pyrus*)

***Double Flowering American** (*Augustifolia*)—New; a sturdy grower; hardy, and of medium size. Flowers resemble delicate pink roses, and are very fragrant. When in bloom looks like a mammoth rose-bush. Blooms while very young. Suitable for almost all soils. C.

DOGWOOD (*Cornus*)

***Red Flowering** (*Flora rubra*)—A valuable variety, producing, beautiful carmine flowers; of great value. B.

***White Flowering** (*Florida*)—A fine American tree, growing from 16 to 25 feet high. Foliage of a grayish green color, very glossy and handsome, turning in the Autumn to a deep red, rendering the tree one of the most beautiful objects of the season. The flowers appear before the leaves in the Spring and are about three inches in diameter; white and very showy. It is one of the most valuable ornamental trees. B.

ELM (*Ulmus*)

Noble trees for street or lawn planting.

***American White** (*Americana*)—The noble spreading, drooping tree of our own woods. One of the grandest and hardiest of park or street trees.—B

***English** (*Campestres*)—An erect, lofty tree, with rather small leaves.—B

Purple (*Stricta Purpurea*)—A beautiful variety ; leaves of rich purple color when young.—B

Scotch or Wych (*Montana*)—A fine spreading tree of rapid growth, foliage large.—B

HORSE CHESTNUT (*Aeculus*)

Red-Flowering (*Rebicunda*)—Not so rapid or fine a grower as the white ; foliage of a deep green and blooms later, with showy red flowers.—B

White Flowering (*Hippocas-tanum*)—A very beautiful well known tree, with round, dense head, dark green foliage, and an abundance of showy flowers in early spring.—A

JUDAS TREE or RED BUD (*Cercis*)

American (*Canadensis*)—A small growing tree, covered with delicate pink flowers before the leaves appear.—B

LABERNUM (*Cytisus*)

***Golden Chain**—Bears long pendant racemes of yellow flowers in June, showy and beautiful. Should be in every lawn.—B

LARCH (*Larix*)

European (*Europaea*)—An excellent, rapid-growing pyramidal tree ; also valuable for timber. Small branches drooping.—A

LINDEN, LIME OR BASSWOOD—*TILIA*

***Americana**—(*American Linden or Basswood*)—A rapid growing, large sized tree ; very large foliage.—B

Europea (*European*)—A very fine tree, with large leaves and fragrant flowers, which are much sought after by the bees.—B

MAGNOLIA (*Magnolia*)

Very beautiful, but exceedingly difficult to transplant with success.

Acuminata (*Cucumber Tree*)—A beautiful pyramidal growing tree that attains a height of sixty to 90 feet ; leaves six to nine inches long, bluish green color ; flowers yellow with bluish purple ; fruit, when green, resembles a cucumber. An American species.—A

Lennei (*Lenne's Magnolia*)—Strong grower, and certainly one of the best. Dark purple flowers, large, cup-shaped, which open in April.—C

Soulangeana—One of the best of the Hybrid Chinese Magnolias ; grows to medium size ; is one of the hardiest of its class ; has cup-shaped flowers three to five inches in diameter.—C

Speciosa—Resembles *Soulangeana* in foliage, but bloom smaller and later. Flowers remain in perfect condition longer than most varieties.—C

MAPLE (*Acer*)

Very valuable and highly ornamental. Vigorous growers free from diseases; hardy, and adapted to all soils. Beautiful in street or park. We name below a few of the best sorts.

Ash-Leaved, Manitoba or Box Elder (*Negundo Fraxinifolium*)—A rapid growing tree, with leaves and branches of a light green. Very hardy.—B

English, or Cork-Barked (*Campestre*)—An attractive variety; hardy and valuable.—B

Japan (*Polymorphum*)—The normal form or type; growth shrubby; foliage small and of a cheerful green in spring and summer, changing to a lovely crimson in autumn. Hardy when well established.—D

***Norway** (*Platanoides*)—A distinct foreign variety, now very popular here on account of its clean, broad foliage of rich, deep green. Stout, vigorous grower. Very desirable and universally planted. When fully grown, 40 to 50 feet.

Purple-Leaved Sycamore (*Purpurea*)—A strong, rapid grower. Foliage deep green on the upper surface and purplish red underneath. Produces a fine effect with other trees. When fully grown, 15 to 20 feet.

Scarlet, or Red (*Rubrum*)—A very beautiful and distinct variety, with flowers of a fine purplish red, appearing very early in the spring, changing to a brilliant scarlet in the autumn. Very desirable for lawn or street planting. When fully grown, 30 to 40 feet.

Schwedler's Norway (*Schwedlerii*)—A valuable tree, recently introduced; young shoots and leaves of a purplish crimson color.—B

***Silver-Leaved, or White** (*Dasycarpum*)—A hardy, rapid-growing native variety of the largest size; foliage bright green above and silvery underneath. Valuable for producing a quick shade. Excellent for street planting. When fully grown 50 to 60 feet.

***Sugar, or Rock** (*Saccharinum*)—A well-known native tree, valuable alike for its production of sugar and wood: Its stately form and rapid growth make it desirable as an ornamental shade tree. When fully grown, 50 to 60 feet.

MOUNTAIN ASH (*Pyrus Sorbus*)

Very ornamental, especially when covered with their bright, scarlet berries.

***American** (*Americana*)—A favorite, erect-growing tree, of medium size, producing white flowers early in spring, followed by clusters of bright scarlet berries, which remain on the tree through the Winter months.—C

European (*Aucuparia*)—Similar in appearance to the above, with finer foliage, and smaller, deeper-colored berries; much more desirable than the American, and everywhere very popular. When fully grown, 20 to 35 feet.

Oak-Leaved (*Quercifolia*)—A very distinct and desirable tree, with compact, pyramidal head and dark-lobed leaves, downy underneath; producing the same flowers and berries as the preceding. Very hardy and desirable for planting on lawns or in dooryards. When fully grown, 20 to 25 feet.

OAK (*Quercus*)

***American White Oak** (*Alba*)—One of the finest American trees ; of large size, and spreading branches ; leaves lobed, pale green above and glaucous beneath. Makes an immense tree.—A

Pin—The Pin Oak is undoubtedly the most valuable variety for all practical purposes. The foliage is dense, finely divided, of a beautiful shining green that colors to sparkling red and yellow in fall. The tree is easily transplanted and grows well on wet or dry ground ; is in fact, the quickest growing of all the Oaks. As an avenue and street tree it is unequaled, and it is one of the best for park planting.—B

POPLAR (*Populus*)

Desirable where rapid growth is wanted.

Balsam (*Balsamifera*)—Large, glossy leaves ; tree grows rapidly.—B

Cotton Wood, or Canadian (*Canadensis*)—A well-known sort.—A

***Carolina**—Pyramidal in form and robust in growth. Leaves large, serrated and pale to deep green in color.—B

Lombardy—(*Fastigiata*)—Well known for its erect, rapid growth and commanding form. Very desirable in large grounds or along roads, to break the average height and forms of other trees. When fully grown, 50 to 75 feet.

SALISBURIA, MAIDEN-HAIR TREE, OR GINGKO (*Adiantifolia*) A

A rare beautiful tree from Japan, with remarkable fern-like foliage, distinct and fine, Especially desirable for planting on lawns or in door-yards. A rapid grower.

SYCAMORE

Oriental or Plane Tree—As an ornamental tree for large grounds, or as a shade tree for street planting, this has no superior. A rapid grower, attains a large size, and is very graceful. Foliage heavy and not subject to the ravages of insects. Especially valuable for city planting as it is not affected by smoke or gas. A

THORN (*Crataegus*)

***Double Scarlet** (*Coccinea fl. pl.*)—Flowers deep crimson with scarlet shade ; very double and considered larger than the double red ; fine rich foliage. C

***Double White** (*Alba flore pl.*)—Has small double white flowers. C

***Paul's Double Scarlet** (*Coccinea fl. pl. Paulii*)—Flowers large, deep carmine scarlet. Superior to any other variety. C

TULIP TREE (*Liriodendron*)

***Tulipifera**—A magnificent native tree with broad, glossy, fiddle-shaped leaves and beautiful tulip-like flowers ; allied to the Magnolias, difficult to transplant unless of small size. A

WALNUT (*Jugans*)

***Black Walnut** (*J. Nigar*)—A native species of large size and majestic form ; foliage beautiful, being composed of from thirteen to seventeen leaflets. A

Butternut or White Walnut (*J. Cinera*)—A native tree of medium size, spreading head and grayish colored bark. A

English or Maderia Nut (*J. Regia*)—A handsome tree which produces fine fruit. Should be more extensively planted as it is quite hardy. B

WILLOW (*Salix*)

***Rosemary-Leaved** (*Rosmarinifolia*)—Budded five to seven feet from the ground, it makes a very handsome, round-headed small tree ; branches feathery, foliage silvery. C

YELLOW WOOD (*Virgilia Lutea*)

One of the finest of American trees, resembling the Robinias, with long racemes of white, sweet-scented flowers in June. B

WEeping DECIDUOUS TREES

Much attention is now given to this class of trees, and we place them separately for the convenience of our patrons. The superior grace and beauty of the weeping varieties render them especially adapted to yard, lawn or cemetery. No collection is complete without them ; among ornamentals they have no superior.

ASH (*Fraxinus*)

European Weeping—(*Excelsior Pendula*)—The common well-known sort ; one of the finest lawn and arbor trees, covering a great space and growing rapidly. B

Golden Bark Weeping (*Aurea Pendula*)—An elegant variety ; bark in winter as yellow as gold. B

BEECH (*Fagus*)

Weeping (*Pendula*)—A native of Belgium. A fine, vigorous and beautiful tree, attaining a large size ; though ungainly in appearance when divested of its leaves, it is extremely graceful and effective when covered with its rich, luxuriant foliage. A

BIRCH (*Betula*)

***Cut-Leaved Weeping** (*Pendula Laciniata*)—Extremely vigorous and hardy. Mr. Scott, in his "Suburban Home Ground," says of it : "No engraving can do it justice ; like the palm tree of the tropics, it must be seen in motion, swaying in the lightest breeze, its leaves trembling in the heated summer air, its white bark glistening through the bright foliage and sparkling in the sun, to enable us to form a true impression of its character." A

***Young's Weeping** (*Youngii*)—Originated near Milfred, Eng., where it was found trailing on the ground. Grafted into stems at some height, it forms pendulous heads, drooping to the ground in fine thread-like shoots ; very beautiful. C

ELM (*Ulmus*)

***Camperdown** (*Camperdown pendula*)—One of the most graceful of all weeping trees, having large, luxuriant and deep green foliage ; well adapted for planting on lawns and covering arbors ; very desirable ; a rapid grower. C

MAPLE (*Acer*)

***Weir's Cut-Leaved** (*Weirii laciniatum*)—A silver maple with remarkable and beautifully dissected foliage. Of rapid growth ; shoots slender and drooping, giving it a very graceful appearance. Should be in every collection. While it makes a large tree if undisturbed, it will bear any amount of pruning and may be easily adapted to small lawns. A

MOUNTAIN ASH (*Pyrus Sorbus*)

Weeping (*Acuparia pendula*)—The branches of this distinct variety are of a straggling pendant character, turning and twisting in all directions and producing a very pleasing effect. Covered during the Autumn with bright red berries. C

MULBERRY (*Morus*)

***Teas Weeping**—The most graceful and hardy Weeping tree in existence, unlike anything heretofore introduced. Forms perfect umbrella-shaped head, with long, slender, willowy branches, drooping to the ground. All who have seen it agree that in light, airy gracefulness, delicacy of form and motion, it is without a rival. It will undoubtedly take the foremost place among Weeping trees ; it has beautiful

foliage ; is wonderfully vigorous and healthy ; is one of the hardiest, enduring the cold of the North and heat of the South ; safe and easy to transplant. Admirably adapted for ornamenting small or large grounds, or for cemetery planting. Trees are from four to six feet high.

WILLOW (*Salix*)

New American Weeping (*Americana pendula*)—An American dwarf variety, which, when grafted on a standard stem, five or six feet high, makes one of the most ornamental of small weeping trees, having long, slender shoots and delicate leaves of great beauty and very graceful. C

Kilmarnock Weeping (*Caprea pendula*)—A distinct variety, having reddish shoots and large, glossy foliage ; grafted at a proper height, about five feet from the ground, it makes a very desirable small lawn tree, having a perfect umbrella-shaped head, and with the branches drooping gracefully to the ground, and is well suited for planting in cemetery lots or other small enclosures. Extensively planted, and should be in every collection of ornamental shrubbery. Hardy and of vigorous growth. C

***Wisconsin Weeping**—Valuable on account of its hardiness. B

Weeping (*Babylonica*)—Our common, well known weeping variety ; forms a large, round-headed, graceful tree ; requires plenty of room, and where space can be spared, is quite desirable. A

EVERGREENS

Evergreens are very desirable, but they are difficult to transplant, and both the time and manner of transplanting should be looked to. They should never be set in the fall after the growth of other trees has ceased. They may be set in September or after they have started in May, but they should be subjected to as little exposure as possible and be set with great care.

ARBOR VITAE (*Thuja*)

American (*Occidentalis*)—This is one of the very finest evergreens for hedges. It is very hardy, and if set at the proper time, with care and without due exposure, it may be relied upon to live, but small plants 12 to 18 inches high, which have been transplanted several times, are preferable. It bears shearing better than any other variety and may be made a very beautiful and dense hedge or screen to divide grounds or for any purpose where it is not required to resist cattle or other animals. B

Compacta—A dwarf, compact variety, with a conical head ; of bright green color ; perfectly hardy. A native of Japan. D

***Pyramidalis** (*New*)—Of upright, compact habit, similar to the Irish Juniper. Very desirable. C

Siberian (*Siberica*)—One of the best of the genus of this country ; exceedingly hardy, keeping color well in winter ; growth compact and pyramidal ; makes an elegant lawn tree. C

Tom Thumb—Similar to the Heath leaved, but more desirable ; remarkable for slow, compact growth ; valuable for planting in cemeteries and small places where large trees are not admissable. D

CEDAR, RED

J. Virginiana—A well-known American tree, with deep green foliage; makes a fine ornamental hedge plant. **B**

FIR

Balsam or Silver—Leaves dark green above, silver beneath, retaining their color during the severest winter; grows rapidly and is very hardy. **B**

Concolor—The Concolor is the Queen of Firs, clothed in robes of ermine and emerald. Its delicate, feathery foliage and handsome shades of coloring render this one of the most beautiful lawn trees. **B**

JUNIPER (*Juniperus*)

American Upright—A remarkable pretty little tree, with dense upright growth and handsome fastigate form. The ends of the young shoots have a recurving habit, which renders the foliage quite graceful. **C**

***Irish (*Hibernica*)**—Very erect and tapering in its growth, forming a column of deep green foliage; a pretty little tree or shrub, and for its beauty and hardiness is a general favorite. **C**

Savin (*Sabina*)—A low spreading tree, with handsome, dark green foliage; very hardy, and suitable for lawns and cemeteries; can be pruned to any desired shape and made very ornamental. **D**

Swedish (*Suecica*)—Similar to the Irish, though not so erect, with yellowish green foliage of somewhat lighter color than the preceding, forming a beautiful pyramidal small tree. **C**

PINE (*Pinus*)

Austrian or Black (*Austriaca*)—A remarkable robust, hardy spreading tree; leaves long, stiff and dark green; growth rapid; valuable for this country. **A**

Mugho (*Dwarf*)—Very distinct, leaves short stiff, a little twisted and thickly distributed over the branches; does not grow tall, but spreads over the ground, generally assuming a globular form; very dense. **D**

Scotch (*Sylvestris*)—A fine, robust, rapid-growing tree, with stout, erect shoots and silver-green foliage. **A**

White (*Strobus*)—The most ornamental of all our native pines; foliage light, delicate or silvery green; flourishes in the poorest soils. **A**

RETINOSPORA

Retinospora Plumosa—An exceedingly handsome small evergreen from Japan, with a feathery, light green foliage. **D**

***Retinospora Plumosa Aurea**—Like the preceding, a plant of great beauty; foliage soft plume-like, of a golden yellow color; close and compact habit; should be in every amateur collection. **D**

Retinospora Argentea—The bright green foliage is silver tipped and mottled with creamy white. **D**

Retinospora Squarrosa—Dense growth; soft beautiful silvery blue foliage, arranged in spirals. **D**

Retinospora Gracilis Aurea—A graceful small tree, the fern like young shoots o a light golden color. **D**

SPRUCE (*Abies*)

Colorado Blue (*Picea Pungens*)—A rare elegant tree with foliage of a rich blue. One of the most distinct and striking of all the spruce family. A free grower perfectly hardy. B

Hemlock or Weeping (*Canadensis*)—An elegant, pyramidal tree, with drooping branches and delicate dark foliage like that of the Yew; distinct from all other trees. It is a beautiful lawn tree, and makes a highly ornamental hedge. A

***Norway** (*Excelsa*)—A lofty, elegant tree of perfect pyramidal habit, remarkably elegant and rich, and as it gets age, has, fine graceful pendulous branches; it is exceedingly picturesque and beautiful. Very popular and deservedly so, and should be largely planted. One of the best evergreens for hedges. A

RHODODENDRON

Rhododendrons are superb evergreen shrubs, producing dense clusters of magnificent flowers, being white, red, pink and purple. We can supply all colors, and offer a large list of named varieties. We would suggest that planters leave selections to us, specifying shades of color only, when we will select sorts adapted to the section in which they are to be planted. We make a speciality of hardy varieties. Very ornamental and desirable, especially when grouped. D

YEW (*Taxis*)

Erect English—A very fine pyramidal variety of the English Yew, with dark green foliage; hardy and desirable. Much used for hedges. D

UPRIGHT DECIDUOUS TREES

Our shrubs are all strong, well-rooted, transplanted stock from open ground. Once carefully planted in suitable positions they increase in size and beauty from year to year, and require but little further care. The time of bloom of the different sorts extends over nearly the whole season, though the greatest show is to be expected in Spring and early Summer.

We can supply many Flowering Shrubs in addition to those described, but confine ourselves to those having the greatest merit, and especially to such as possess some distinct qualities, either of foliage or of flower.

C. denotes shrubs which attain 9 to 12 feet in height at maturity.

D. " " " " " 5 to 8 " " "

E. " " " " " 1 to 4 " " "

ALTHEA or ROSE OF SHARON (*Hibiscus*)

The Altheas are fine, free-growing flowering shrubs of very easy cultivation. Desirable on account of flowering in August and September, when nearly every other shrub or tree is out of bloom. They are of good size, many colored, trim and attractive. Tree Altheas are very desirable, and the handsomest flowering tree we know of. Perfectly hardy and can be had in various colors if desired. Entirely free from all insect pests; always gives delight and satisfaction. Require pruning each spring. We can supply double or single flowering Altheas in the following colors: blue, pink, purple, red, white and variegated. C

AZALEA

***Ghent**—This class is hardy and will thrive in any good, rich garden soil, but will do best in a light, moist soil, in which a liberal quantity of leaf-mould is mixed.

Mollis—A beautiful specie from Japan; perfectly hardy, with large flowers and varied in color. The colors run through all the shades of orange, yellow and carmine. E.

BERBERRY (*Berberis*)

The Berberries are a most interesting family of shrubs, varying in size from two to six feet high, rich in variety of leaf, flower and habit. Their showy orange and yellow flowers in May or June are succeeded by bright and various-colored fruit very ornamental in Autumn and Winter.

***American** (*Canadensis*)—Yellow flowers, succeeded by red berries. D.

European (*Vulgaris*)—Yellow flowers in terminal racemes, followed with scarlet fruit. D.

Fortuneii—Foliage turns red in autumn, dwarf habits. D.

Purple-Leaved (*Purpurea*)—A very handsome shrub, growing from three to five feet high, with violet purple leaves and fruit. Makes a fine ornamental hedge. D.

***Thunberg's** (*Thunbergii*)—Dwarf habits; small foliage, changing to red in the fall; very pretty. E.

CALYCANTHUS, SWEET-SCENTED SHRUB OR CAROLINA ALLSPICE
(Floridas)

This is very desirable on account of the peculiarity and very pleasing fragrance of its wood; its foliage is rich and flowers of a rare chocolate color, with an agreeable odor. The Calycanthus blossoms in June and at intervals through the summer; very desirable. When full grown, 6 to 8 feet.

CRAB

***Bechtel's Double-Flowering American Crab** (*Pyrus Augustifolia*)—A medium-sized, hardy ornamental tree of great beauty. When in bloom this tree presents the appearance of being covered with roses, scenting the atmosphere for a long distance with a perfume equal to that of any rose. Unlike many other trees, it does not bloom until the leaves are fully developed, which adds greatly to its beauty. C.

CORNUS (*Dogwood*)

Mascula Var. (*Variegated Cornelean Cherry*)—Foliage beautifully variegated with white. D.

Red-Branched (*Sanguinea*)—A native species; very conspicuous and ornamental in winter, when the bark is blood red. D.

DEUTZIA (*Deutzia*) D

This valuable plant comes from Japan. Its hardihood, fine habit, foliage and beautiful flowers, render it the most popular of flowering shrubs. Flowers are produced in long racemes during the latter part of June.

Candida (*Candidissima*)—Flowers double white; excellent for floral decoration.

***Double-Flowering** (*Crenata flore pleno*)—Flowers very double, white, tinged with rose.

Golden Variegated (*Aurea variegata*)—A new variety, with golden variegated leaves. A choice acquisition.

Lemoine—Flowers pure white, borne on stout branches of upright growth. Dwarf and free flowering. Although comparatively new is already very popular.

***Pride of Rochester**—A variety which excels all others in size of flower, length of panicle, profuseness of bloom, and vigorous habit. A charming acquisition.

ELDER (*Sambucus*)

A well-known shrub which blossoms in spring and afterward is covered with handsome berries; there are several varieties.

Golden (*S. Aurea*)—A beautiful variety with light yellow leaves, which hold their color well and render the plant very conspicuous and effective. C.

EUONYMUS

Euonymus (*Burning Bush* or *Strawberry Tree*)—A very ornamental and showy bush, whose chief beauty consists in its brilliant berries, which hang in clusters from the branches until mid-winter; berries rose-colored; planted with a background of Evergreens the effect of contrast is very fine. C.

ELAEAGNUS LONGIPES

Elaeagnus Longipes—A well-known shrub of spreading habit, dark green foliage, silvery-white beneath, with yellow flowers and bright red fruit that is beautiful as an ornament on the bush and is esteemed very highly by many for use in place of cranberries. Within the last few years there have been many thousand plants imported from Europe, the demand having far exceeded the supply of American nurserymen. D.

FILBERT

Purple-Leaved (*Corylus avellana atropurpurea*)—A vigorous shrub, with large, deep purple leaves; very ornamental; produces good fruit. C.

FRINGE

***Purple or Smoke Tree**—A very elegant and ornamental large shrub, with curious, hair-like flowers, which, being a pinkish brown color, give it the names, "Purple Fringe" and "Smoke Tree." The blossoms are in July, sometimes literally covering the tree and remaining all summer. C.

White (*Chionanthus Virginica*)—An entirely different plant from the preceding; has handsome, large foliage and racemes of delicate white flowers that hang like finely-cut shreds or fringe of white paper. C.

FORSYTHIA, OR GOLDEN BELL

***Forsythia, or Golden Bell**—A very singular and quite ornamental shrub. Its branches in the early spring before the leaves appear, are covered with bright golden yellow pendulous flowers. D.

GLOBE FLOWER

Globe Flower (*Kerria Japonica*)—A slender green-branched shrub, five or six feet high, with globular yellow flowers from July to October.

GOLDEN GLOW FLOWER

***Golden Glow Flower, Summer Chrysanthemum** (*Rudbeckia Laciniata*)—A hardy perennial plant, growing eight feet high, branching freely and bearing by the hundreds, on long graceful stems, exquisite double blossoms of the brightest golden color and as large as the Cactus Dahlia.

HALESIA (Snow Drop Tree)

Silver Bell—A beautiful large shrub, with handsome white bell-shaped flowers in May. Very desirable. C.

HONEYSUCKLE (*Lonicera*)

***Red Tartarian**—A beautiful shrub; vigorous and producing large bright red flowers striped with white, in June. D.

***White Tartarian**—A large shrub having white flowers, in May and June. D.

HOP TREE, or SHRUBBY TREFOIL (Ptelea)

A large shrub, or small tree, of rapid growth and robust habit. Fruit winged and in clusters. Flowers in June. C.

HYDRANGEA

***Hydrangea—Arborescens Sterilis** (Hills of Snow)—This, superb new Hydrangea is a variety of the hardy native species *H. arborescens* commonly found "wild" in most of the states east of the Mississippi river. The sterilis is likewise absolutely hardy and is, moreover, of easy culture and is an exceedingly prolific bloomer. A five year old plant has produced one hundred and twenty-six perfect blooms at one time. E.

Otaksa—Foliage a beautiful deep green. Produces immense clusters of rose-colored flowers in profusion, in July. Should be planted in tubs. E.

***Paniculata Grandiflora**—A fine, hardy shrub, growing to the height of eight or ten feet; flower white, in great pyramidal panicles a foot long, produced in August or September, when most other shrubs are out of bloom.

***Tree Hydrangea (Paniculata Grandiflora)**—This is beautiful as a tree, growing in loveliness as it acquires age and size. It is as hardy as a native oak, producing at the end of the branches great masses of flowers, the individual, clusters often being nearly a foot long. C.

JAPAN MAPLE

Japan Maple—Very beautiful and very expensive. D.

***Blood-Leaved**—A bushy shrub with deep cut leaves. The young growth is of a very brilliant crimson. One of the best. D.

SYRINGA—LILAC

For many years we have been collecting a stock of Lilacs, and after a thorough test in regard to hardiness and vigor we take pleasure in offering the following varieties. We have imported heavily in the past, and the French varieties are all from reliable sources, and they have been grown to perfection on our own grounds before being offered. We especially recommend this list of named varieties, and we can confidently say that in size, form and color there are kinds that will surpass the old favorites which have for so long held a position quite their own with flower lovers.

Alphonse Lavelle—Flowers a bluish lilac. C.

***Charles X.**—A strong rapid growing variety; large shining leaves; flowers reddish purple. C.

Dr. Lindley—Large, compact panicles, with purplish lilac flowers, dark red in the bud; very fine. C.

***Frau Dammann**—This produces the largest clusters of white lilacs, of the common species, in cultivation. C.

Josikae—A species found in Transylvania; leaves long; flowers blue. C.

Lamarck—Rosy-lilac. C.

***Leon Simon**—Thyrse, attaining 14 inches in circumference; 4-parted; compact; crowded with blossoms. These flowers, which are piled one on another, are very double, perfectly round; color bluish-crimson; buds, clear coral. C.

***Ludwig Spaeth**—Flowers a dark purple borne in large panicles; the best of the dark varieties. C.

***Marie Le Graye**—Large panicles of white flowers; the finest white lilac. C.

Mad. Lemoine—Double white. C.

***Persian Lilac**—(S. Persica)—Grows four to six feet high, foliage small and flowers, a bright purple.

***Persian White Lilac**—(S. Persica, var. Alba)—Delicate, white, fragrant flowers, shaded with purple. D.

Pres. Carnot—Lilac, white centre. C.

President Grevy—Panicles large, pale blue and very double. C.

***Purple Lilac**—(S. Vulgaris)—The well-known purple variety; always a standard sort. C.

Rothomagensis (Rouen)—Violet. C.

Vilosa or Tree—A remarkable new species from Japan, becoming a good-sized tree; foliage dark-green, glossy; flowers small, feathery, but formed in great panicles, often 18 inches long; very light straw color; a month later than other lilacs. C.

White Lilac—(S. Vulgaris Alba)—Too well-known to need description; flowers white and fragrant. C.

PLUM (PRUNUS)

Plum (Prunus)—Double Flowering—(P. Triloba)—A very desirable shrub, introduced from Japan. Flowers semi-double, of delicate pink, upwards of an inch in diameter, thickly set; hardy; flowers in May. D.

***Prunus Pissardii**—The tree is a decided contrast in itself. The leaves, as they first appear, on the tips are a beautiful orange color, and they mature to a rich purple, clear and distinct, growing darker as the season advances. The leaves remain until late in the fall—a decided contrast to other shrubs. C.

PRIVET—CALIFORNIA

Privet—California—(L. Ovalifolium)—The well-known variety; vigorous and hardy; deep glossy green; useful for hedges and borders. D.

***Privet, Vulgaris** (English or Common)—Very similar to California, but more hardy D.

PAEONIES

It is surprising that so beautiful a flower, almost equal to the rose in brilliancy of color and perfection of bloom, should be so little grown. One great feature in favor of the Paeony is its hardiness. In the severest winters the plants require no protection, and their freedom from disease and insect pests are other important arguments in their favor. Extra care and attention are not required to bring the bloom to its natural beauty, and each succeeding year will add to their size. Our collection includes the best and most distinct varieties.

Agida—Violet rose, semi-double

- Allea Plena**—Light rose, centre white, fragrant.
- Bucchi**—Pinkish white, centre yellow with white.
- Charlemagne**—Creamy white, centre very soft lilac pink with chamois shade first class.
- *Chrysanthemiflora**—White or dull pink; centre yellow and white on citron yellow ground.
- *Daniel Trotman**—Carmine red good shaped flower.
- Duc de Caze**—Broad guard petals lively carmine pink, those of the centre frimbriated, salmon color.
- Duc of Wellington**—Sulphur white, fine form (extra).
- Duguescline**—Dark violet rose.
- *Edulis Superba**—Light violet rose mixed with some white bands.
- L'Empereur**—Purple.
- Faust**—Delicate lilac pink, centre chamois.
- Felix Crousse**—Very glowing red, centre ruby flame color, first class variety.
- Festiva Maxima**—Pure white, flaked with purple, large fine bloom, first class certificate R.H.S. and R.B.S. 1886, London.
- Formosa Rosea**—Bright rose, centre pale rose, spotted with pale yellow.
- Fragans, Anderson**—Light purple, fragrant.
- *Fringe Leaf**—Foliage a bright green, flower, scarlet crimson.
- General Cavaignac**—Lively lilac pink, shaded clearer pink.
- Grandiflora Superba**—Light lilac rose, centre bright salmon with mankeen.
- Humei, Anderson**—Soft Rose.
- Jeanne d'Ar**—Tender rose, centre suphury yellow and rose, abundant bloomer, (extra).
- Magnifica**—Very light pink, centre cream with white.
- Pulcherrima**—Pinkish rose, centre rose with salmon.
- Purpurea Superba**—Dark violet purple.
- Raphael**—Large blooms in clusters, very deep garnet red.
- Rosea Elegans**—Delicate rose with salmon.
- Thryne**—Light pink, centre sulphur, changing to white, carmine spotted.
- Umbellata**—Light lilac rose, centre light sulphur.

Victoria—Rose, centre light yellow with rose heart.

Victoire Tricolor—Dark rose, centre cream with rose.

QUINCE (*Cydonia*)

Grandiflora—Flowers nearly white, very showy; fruit extremely large and almost pear-shaped. D.

***Scarlet** (*Japonica*)—One of the best known; and a very handsome, hardy ornamental shrub. D.

SNOWBALL OR ARROWROOT (*Viburnum*)

***Common, or Guerder Rose** (*Sterilis*)—The well-known sort, and a general favorite on account of its large clusters of white flowers in June. Very handsome and desirable, and should be in every collection. C.

***High, or Bush Cranberry** (*Opulus*)—Red berries resembling cranberries; esteemed by many. C.

SPIRAEA

Hardy and easily grown; of low growth, requiring but little room; long bloomers; in season about three months.

Arguta—Dwarf; flower clear white. Best very early flowering Spiraea. D.

***Anthony Waterer**—A beautiful variety, with broad heads of deep pink flowers. Grows 2 to 3 feet high, making a shapely bush. Blooms almost continuously from June throughout the season. D.

Billardi—Rose-colored; flowers in spikes; blooms nearly all summer. D.

***Callosa** (*Fortunei*)—Very fine and distinct; having bright, rose-colored flowers in flat clusters, blossoming throughout the summer. D.

Callosa Alba—A dwarf variety of the above, having pure white flowers in the greatest profusion. Very desirable on account of its dwarf habit and free flowering; keeps all summer. D.

***Double-Flowering Plum-Leaved, or Bridal Wreath** (*Prunifolia*)—Very desirable, having double, daisy-like flowers of pure white in the greatest profusion. Very hardy and in every way desirable, as it keeps in flower a long time. D.

Douglass (*Douglassi*)—Very handsome; having spikes of rose-colored flowers in July and August. D.

Golden, or Golden-Leaved Ninebark (*Aurea*)—This is one of the most effective shrubs for a lawn; foliage green, bordered with a rich golden yellow; very distinct and beautiful, particularly in June, when the branches are covered with a double white flower. D.

Lance-Leaved (*Reevesii*)—A charming shrub, with narrow, pointed leaves, and large, round clusters of white flowers that cover the whole plant. D.

***Thunberg's** (*Thunbergii*)—Extremely neat and graceful in its habits; dwarfish and rounded; drooping branches; narrow, yellowish green foliage; white flowers, early in spring. One of the best and deserves a place everywhere. D.

***Van Houtte**—The grandest of all the Spiraeas; it is a beautiful ornament for the lawn at any season, but when in flower it is a complete fountain of white bloom, the foliage hardly showing. Clusters of twenty to thirty flat, white florets make up the raceme, and these clusters are set close along the drooping stems. Perfectly hardy, and an early bloomer. D.

STRAWBERRY, OR SPINDLE TREE (*Euonymus*)

American (*Americanus*)—This is a very beautiful small tree, or shrub, when covered with its red berries through the winter. D.

SYRINGA OR MOCK ORANGE (*Philadelphus*)

All the varieties flower in June after the Weigela. By planting the late-flowering sorts, the season may be considerably extended.

***European Fragrant or Mock Orange** (*Philadelphus Coronarius*) (C)—A well-known very hardy shrub, with showy white flowers, which are very fragrant.

***Golden-Leaved** (*Foliis Aureis*)—A beautiful new variety, with bright yellow foliage, which affords pretty contrasts with other shrubs, especially with the purple-leaved varieties. E.

Large Flowering (*Grandiflorous*)—Large, showy flowers. A valuable variety. C.

Lemoine's Erect Syringa (*Lemoinei Erectus*)—A charming variety of upright growth; flowers small, yellowish white, fragrant, completely covering the plant. C.

TAMARIX

This is a hardy shrub, with small leaves similar to the Juniper; the flower is small and delicate and borne in spikes; does well by the seaside, where other plants cannot live.

Africana—Flowers in May; very handsome foliage. D.

Chinensis—Rose-colored, flowers in September. D.

WEIGELA (*Diervilla*)—D.

Very desirable, hardy, easily grown and great bloomers. As these shrubs grow older they gradually spread and droop; flower in June and July; in borders and groups of trees they are very effective; bloom after lilacs in June. The following are the most desirable varieties:

Ambilis or Splendens—Of robust habit; large foliage and pink flowers. Blooms freely in autumn. A great acquisition.

***Candida**—Thought by some to be the best of all. Of vigorous habit; an erect grower; flowers pure white, produced in great profusion in June, the plants continuing in bloom through the summer.

Desboisii—A beautiful variety, with deep, rose-colored flowers, resembling *Rosea*, but much darker. One of the darkest and the best.

Hortensis Nivea—Flowers pure white retaining their color, and being clear enough for the choicest bouquets; foliage large; habit vigorous, and a profuse bloomer. Very distinct and desirable; 3 to 4 feet.

***Rosea**—An elegant shrub, with fine, rose-colored flowers. Introduced from China by Mr. Fortune, and considered one of the finest plants he has discovered. Quite hardy. Blooms in May.

Variegated-Leaved Dwarf Weigela—Of dwarf habit, and possessing clearly defined, silvery variegated leaves; flowers nearly white. It stands the sun well, and is one of the best dwarf, variegated-leaved shrubs.

EVERGREEN SHRUBS

MAHONIA

Holly-Leaved—(*Aquifolia*)—A most beautiful shrub, with glossy, holly-like leaves, which change to brownish-green in winter, with clusters of bright, yellow flowers in May.

EUONYMUS

Radicans Variegata—A charming shrub of dwarf and trailing habit; it is perfectly hardy and has foliage beautifully variegated with silvery white tinted with red in the winter. Unsurpassed for edging.

Rhododendron—In variety.

These are the most magnificent of all evergreen shrubs, with rich, green foliage and superb clusters of showy flowers. They require a peaty soil, free from lime, and a somewhat shaded situation; they do best near the seashore and will repay all the care that may be bestowed in preparing a bed suited to their wants.

HARDY CLIMBING SHRUBS

AMPELOPSIS

***American Ivy, or Virginia Creeper** (*A. Quinquefolia*)—A native vine of rapid growth, with large, luxuriant foliage, which in autumn assumes the most gorgeous crimson and purple coloring.

***A. Veitchii**—(*Veitchi's Ampelopsis*)—Japan. Leaves a trifle smaller and more ivy like in form than the preceding. Overlapping each other they form a dense sheet of green. It grows rapidly and clings to the surface of even a painted brick wall with great tenacity. The foliage is especially handsome in summer and changes to a scarlet crimson in autumn. For covering walls, stumps of trees, rocks, etc.

***Woodbine or Engleman's Ivy**—(*A. Quinquefolia, var. Engelmanni*)—A type of *Quinquefolia*, which has long been desired. It has shorter joints and smaller and thicker foliage. It is better equipped with tendrils, by which it will climb walls of stone or brick as closely as the *Veitchii* (*Boston Ivy*). It should be planted in the Central and North-western States, in place of the *Veitchii*, as it is perfectly hardy, withstanding heat and cold much better.

***Aristolochia, or Dutchman's Pipe**—*Sopho*—A rapid growing vine, with magnificent foliage, ten to twelve inches in diameter, and curious pipe-shaped, yellowish-brown flowers.

HONEYSUCKLE (*Lonicera*)

Chinese Twining—(*Japonica*)—A well-known vine, holding its foliage nearly all winter. Blooms in July and September and is very sweet.

***Hall's Japan**—(*Halleana*)—A strong vigorous evergreen variety, with pure white flowers, changing to yellow. Very fragrant, covered with flowers from June to November.

Japan Golden-Leaved—(*Aurea reticulata*)—A handsome variety, having foliage beautifully netted or variegated with yellow.

Monthly Fragrant—(*Belgica*)—Blooms all summer. Flowers red and yellow. Very sweet.

Scarlet Trumpet—(*Sempervirens*)—A strong grower and produces scarlet, inodorous flowers all summer.

IVY

***Common English**—(*Hedera Helix*)—The Ivy, being an evergreen, not very hardy, and suffering from exposure to the winter sun, should be planted on the north side of buildings or walls. It is very effective grown in pots for inside decoration.

MATRIMONY VINE (*Lycium*)

A vigorous hardy climber. It will soon cover any desired space. It has dark green foliage and beautiful flowers and loads of small berries, which are seen in all parts of the country at Christmas time.

Trumpet Vine—(*Bignonia Radicans*)—A splendid climber and hardy, with clusters of large trumpet-shaped, scarlet flowers in August.

WISTARIA

***Chinese Purple**—(*Sinensis*)—A most beautiful climber of rapid growth and producing long, pendulous clusters of pale blue flowers. When well established makes an enormous growth; it is very hardy and one of the most superb vines ever introduced.

Chinese White—(*Sinensis Alba*)—Introduced by Mr. Fortune, from China, and regarded as one of his greatest acquisitions. Rather tender.

CLEMATIS OR VIRGIN'S BOWER

None among hardy perennials exceed in beauty and effectiveness the finer sorts of Clematis. As a climber for the veranda, a screen for fences, for pillars along garden walks, for training on walls or arbors, in masses on rockwork, or cultivation in pots, it has no rival among strong-growing blossoming plants. The Clematis should be grown in rich, deep, sandy loam, and be well mulched with rotten manure in winter. The richest sheets of bloom and largest flowers are obtained where it has partial shade and a liberal supply of water at the roots.

SMALL FLOWERING

Coccinea—Distinct from other varieties; bright coral scarlet flowers. July to October.

Crispa—A handsome native variety, with nodding, bell-shaped lavender purple fragrant flowers, which are an inch or a little more in length and breadth with revolute sepals; very distinct.

***Paniculata**—A native of Japan. A beautiful and rapid growing climber, which in a very brief time will cover any ordinary verandah. The flowers are small, pure white and delightfully fragrant, and are borne in enormous masses, almost concealing the foliage. Entirely free from blight and regarded as a great acquisition.

LARGE FLOWERING

Baron Veillard—(*New*)—Flowers large and very abundant; a handsome rose color. One of the best of its class.

Duchess of Edinburg—This is one of the best of the double white varieties. The flowers are pure white four inches across; very deep. They are also remarkably sweet scented.

Gem—A new and perpetual-blooming variety. The flowers are of a deep lavender blue. June to October.

***Henryii**—This is the finest of all white Clematis and should find a place in every collection. It is not only a vigorous grower, it is a remarkably free and continuous bloomer, beginning with the earliest and holding on with the latest. Flowers large, of a beautiful creamy white, with reddish-chocolate anthers. June to October.

***Jackmanni**—This is, perhaps, the best known of the fine perpetual Clematis, and should have credit for the great popularity now attending this family of beautiful climbers. The plant is free in its form of growth and an abundant and successful bloomer, producing flowers until frozen up. The flowers are large, of an intense violet-purple, remarkable for its velvety richness. Jackmanni has no superior and very few, if any equals. July to October.

Kermessina Splendida—This is the most profuse bloomer of all the Clematis, commencing in early summer and continuing through the season; literally covered with scarlet crimson flowers. Not subject to blight, and is a vigorous grower.

Lawsoniana—One of the finest of all; a vigorous grower and continuous bloomer. The flowers are very large, often nine inches in diameter. Opening a rich glistening, rosy purple, they gradually change to a mauve purple. June to October.

***Madam Edouard Andre**—First seen in this country at the World's Fair, at Chicago; flowers large, abundant and a beautiful crimson purple. Beyond doubt the finest of its class.

Miss Bateman—One of the most charming of the spring flowering hybrids, having large white flowers with chocolate-red anthers and somewhat fragrant. May and June.

***Ramona**—Said to be an American seedling of the Jackmanni type, one of the strongest growers; flowers lavender blue, similar to the Gem.

HEDGE PLANTS

Hedges are valuable as a defense against animals, as wind-breaks, to protect orchards, gardens or farms unduly exposed, and as ornamental fences or screens to mark the boundaries of a lawn or cemetery lot.

DIRECTIONS FOR SETTING

Evergreens must be handled with care, so as not to allow the roots to become dried by the wind. Plants for hedges should be placed about twelve inches apart; larger sized plants will require more space.

California Privet, Honey Locust, and Osage Orange are generally planted in double rows about nine inches apart.

Other deciduous shrubs for hedges should be planted about twelve inches apart.

DEFENSE AND ORNAMENT HEDGES

Buckthorn (*Rhamus*)—One of the most popular and effective plants. A fine, robust grower, of European origin, with dark green foliage, white flowers and small black fruit in fall.

Honey Locust—For turning cattle and as a farm hedge, is much the best in the Northern States. It is of vigorous growth, perfectly hardy, thrives with ordinary care and is sufficiently thorny to be impenetrable.

Quince, Japan—See description, page 65.

HEDGE FOR WIND-BREAKS

Norway Spruce is the best. Its vigorous habit, rapid dense growth, when properly sheared or pruned, large size and entire hardiness, are characteristics not easily obtained in any other evergreen.

American Arbor Vitae comes next. Belts of pine are useful as a protection.

American and Siberian Arbor Vitae, Norway Spruce, and especially Japan Quince and Purple Barberry, all described in their appropriate places in this Catalogue, make beautiful screens or hedges.

The Crimson Rambler Hedge—This rose is such a strong, rampant rapid grower that it soon makes a most desirable hedge or screen for a fence. Trained along a wire fence and planted three or four feet apart, they form a perfect screen and when in full bloom with its thousands of miniature crimson roses in clusters makes a truly magnificent sight.

Privet, California—This well-known hedge is probably used more extensively than any other variety. In fact our plantings each season exceed that of any other ten varieties. In many towns and cities the Privet is used more than all other varieties of plants or evergreens put together. In this state the leaves do not usually drop before the middle of January, hence it is almost evergreen.

BULBOUS AND TUBEROUS ROOTED PLANTS

The ease with which bulbous-rooted plants are cultivated is no small thing in their favor. While seeds of annuals often fail to come up, or when after growing, the plants die in transplanting, or are otherwise checked in their growth, and while bedding plants are frequently discouraged by the change from the hot house to the border—while shrubs require frequent pruning, trimming and constant watching and training to keep them in proper condition for blooming, a bulb only requires to be put in the ground at the proper time and place, and it will afterwards take care of itself, abundantly rewarding the grower for affording it an opportunity to become “a thing of beauty,” and consequently “a joy forever.”

Early in the spring, usually by March 1st, we see the Snow Drop and Crocus forcing themselves through the still frozen ground. These are followed in quick succession by Crown Imperials, Hyacinths and Tulips, all of which will be in flower long before it is generally considered time to "make garden." As there is not a week through the season that there is not the natural flowering time for some of this class of plants, a bed with them alone would never be out of bloom from early spring till the autumn frosts, and with a little attention at the time of planting, a succession of the most gorgeous flowers can be had through the entire season.

HARDY HERBACEOUS PLANTS, INCLUDING BULBS AND BULBOUS PLANTS

For Either Spring or Fall Planting, except where noted.

We offer a fine assortment of the best varieties of these useful plants, which are exceedingly valuable on account of their hardiness, easy culture and showy appearance. Most of these will live all winter in the open ground and bloom freely every year. The leading varieties for this purpose follow:—

Achillea (*The Pearl*)—Small white flowers. Splendid for borders. Hardy herbaceous.

Anemone Japonica (*Wind Flower*)—Red flowering and white flowering. Flowers 2 1-2 inches in diameter, white or purplish rose with golden centres. September to November. Height 2 1-2 feet.

Aquilegia (*Columbine*)—Flowers large, blue, with long spurs.

Arundo Donax—A handsome reed, growing 12 to 15 feet high.

Boltonia (*Asteroides*)—Flowers large, white, tinged with pink. 4 to 5 feet. September.

Bocconia (*Plume Poppy*)—Attractive plant for lawns.

Campanula (*Bell Flower*)—Rich purple flowers. June.

Candytuft (*Ibris*)—Valuable for edging.

Canna—Highly ornamental plants for both flowers and foliage. Height 2 to 5 feet. May be grown single or in masses. Leaves green or brownish red; flowers scarlet, yellow, cream, etc. Spring planting only.

Carnations—In all varieties and colors.

Cerastrum—Low spreading plant, woolly foliage; white flowers.

Chrysanthemum—In all varieties and colors. Fall only.

Crocus—All colors. Plant fall only.

Dahlia—A collection of these is most fascinating. We have all colors and kinds:—

Decorative—the old fashioned kinds—

C. W. Burton—pure yellow.

Duke of Clarence—crimson-maroon.

Harry Freeman—white.

Lyndhurst—brilliant scarlet.

Perle de la Tete D'Or—pure white with lavender tinge.

Cactus—the newest class—

Gloriosa—scarlet.

Island Queen—light mauve.

Standard Bearer—fiery Scarlet.

Sir Roger—terracotta red.

Delphinium (*Larkspur*)—Blue flower.

Dianthus (*Pinks*)—Larger flower than the old fashioned pinks.

Dielys (*Bleeding Heart*)—Rosy heart shaped flowers.

Digitalis (*Fox-Glove*)—Long bell-shaped flowers, white and red.

Erianthus (*Ravenna*)—Resembles pampas grass. Nine to twelve feet.

Eulalia (*Gracilis*)—Very beautiful grass, long slender foliage.

Eulalia (*Japonica*)—Large grass with plumes.

Eulalia (*Zebrina*)—Large grass marked crossways with bands.

Funkia (*Lily*)—Heavy foliage and lily-like flowers.

Flame Flower (*Tritoma*)—Late blooming plant, with rich scarlet flowers on spikes, 12 to 18 inches long.

Gaillardia Grandiflora (*Blanket Flower*)—Large flowers, bright colored.

Gladiolus—The most attractive of all summer flowering bulbs. Plant 6 to 9 inches apart, about 4 inches deep. Plant in spring only.

Helianthus (*Perennial Sunflower*)—Valuable late flowers.

Hemerocallis (*Day Lily*)—Orange flowers in large clusters.

Hollyhocks—A fine collection, both double and single.

Hyacinths—The most beautiful and fragrant of early spring flowering bulbs. Much used for winter forcing. Plant in fall only.

Hypericum—Dwarf shrub, yellow flowers all summer.

Iris (*German*)—The true "Fleur de Lis," national flower of France. Hardy. Rival of the orchids.

Japan—Flowers of immense size. Most beautiful shades.

Jonquils (*Narcissus Jonquile*)—Adapted for pots or outdoor.

Lily of the Valley—Hardy. Increase rapidly.

Lillies:—

AURATUM (*Gold-banded Lily of Japan*)—Flowers large; delicate ivory white, dotted with chocolate crimson spots with a bright golden band through centre. The finest of all.

CANDIDUM—The old fashioned pure white garden lily.

TIGER LILY—Bright orange scarlet with dark spots.

Monarda (*Oswego Tea*)—Scarlet flowers; very showy.

Narcissus or Daffodil—Early spring bloomer, yellow flowers. Fall planting only.

Palm Kentia—Fine house plant; hairy leaf.

Latania—Fine house plant; broad; smooth leaf.

Pinks (*Delphinium*)—A very pretty flower.

Platycodon—Almost identical with *Campanula*.

Phlox—Assorted colors. One of the finest of the old fashioned flowers.

Poppy Iceland—Deep showy yellow flower.

Poppy Oriental—Deep scarlet; large and showy.

Primrose—Old fashioned well known flower.

Rubber Plants—Very desirable house plants.

Violets—Too well known to need description.

Tulips—The first flowers of spring. Gorgeous show. Single, all colors; double and Parrot. Fall planting only.

Yucca—A rock work plant. Creamy white bell-shaped flowers.

ROSES

Soil and Planting—As soon as you have placed your order, attention should be turned to the soil in which you expect to plant. Roses require a rich soil, and while they will do well in any good garden mould, they will do much better if a liberal supply of manure is furnished. Spade up the ground to a depth of from twelve to twenty inches, mixing in some well rotted cow manure. Do not plant in a low spot where drainage is poor; but if you must do so, see that some broken bricks, crockery, cinders, etc., are put at the bottom of the bed to act as an underdrain. Roses on their own roots should be planted just as they stood in the nursery. There is usually a dark earth line to go by—set even with this. Budded or grafted roses must be set so that the junction of stock and graft is two inches below the surface of the soil. Keep the roots of your roses in water until you are ready to plant them, then dig a hole the required depth, set in the plant, spread out the roots naturally fill it with fine soil, and press it down firmly with hand or foot, water well and shade for a day or two, if the weather is warm and sunny. The distance apart for your roses must be decided by their habit of growth. Strong growers will need a distance of three feet, weaker ones only one or two.

Pruning and Cultivation—At time of planting, all roses should be cut back more or less. After becoming established, pruning should be done in March. It is always best to cut out weak and decayed wood, and such shoots as crowd the plant or prevent light and air from gaining free access. Let what pruning you do be carefully done, and with a sharp knife or pruning shears. The more vigorous varieties may be pruned less than others. The old rule and the best one is, "for weak growing, delicate plants, severe pruning; for vigorous, strong ones, shorten the branches only a little, but thin them out well." To make Hybrid Perpetuals

bloom twice in summer, give them a second pruning after their first bloom has fallen in June. Prune for shapeliness of plant and promotion of bloom buds, instead of slashing recklessly among them. Stir the soil frequently about the roots of your roses, and do not plant annuals among them. They must have all the nourishment for themselves if you want them to do their best. Do not let them blossom too much the first year. Let them gather strength into root and stem for next summer, when they will make a grander display.

Protection—Mulch your rose bed heavily with manure in autumn, and for winter protection cover with evergreen boughs. We prefer to stack these about tall roses rather than bend them down. Small ones may be laid over. In hot summer weather give them a light mulch of strawy manure to keep the soil from drying out too rapidly. The rains will wash its nutriment down to the roots.

Hardy Roses include Hybrid Perpetuals, Remontants, which usually bloom profusely during June, and occasionally through the summer and autumn; Austrian those varieties of yellow roses which bloom but once in a season, and all other kinds which live out of doors without protection through the winter. These are all suited for the garden, and thrive the best in the open air. None of them require winter protection.

The Tender Roses include Teas, Bourbons, Bengals or Chinas, Noisettes, and all of those sorts which are suited for either the open ground or house culture, not named among the Hardy class. They are all tender and must be removed to the house during the winter, although the Hybrid Teas can be left in the ground if they are protected by a covering of straw, leaves, evergreen boughs, or something of that kind. They do well in the garden during the summer, and if planted in good soil, most of the varieties will bloom continually.

Climbing Roses are all hardy, and should be planted out of doors. They bloom profusely in June, and some varieties show an occasional blossom during the summer and fall. They are valuable for covering trellises, porches, rocks, etc.

Moss Roses are extremely hardy; most of them are very fragrant; they are excellent June Bloomers, and some varieties bloom occasionally during the summer and autumn. The distinctive feature of the class is the "mossy" covering of the green outer leaves of the bud, which gives them an exquisite beauty to be found in no other rose.

Polyantha Roses—A class of roses of much value for bedding purposes, as they form a mass of bloom. They are of a dwarf habit, and are continuously in flower during the entire season. The flowers are produced in numerous clusters, the single ones being about one and a half inches across. The clusters produce from twenty-five to one hundred flowers. The Polyantha Roses are hardy with slight protection. They are especially valuable for planting on the borders of beds of taller growing kinds, or on the edge of foliage beds, as they are constantly in bloom, and rarely attain a height of more than ten or twelve inches. They are also very useful in cemeteries where they at once command close attention.

Rose Rugosa—A Japanese species, undoubtedly one of the handsomest hardy shrubs in cultivation. It forms a sturdy bush four to five feet high, covered with large, dark green pinnate, glossy foliage, crowned with terminal clusters of ten to twenty flowers, three inches in diameter. It is now well known. Both its rosy crimson and white varieties are found in all good collections and its *large, handsome scarlet fruit*, is most showy during the autumn months. Excellent for cemeteries. Very hardy.

Pruning Hybrid Perpetual and Moss Roses—These bloom best on strong, new wood, and should be cut back severely (say one-half of the last season's growth) in the Spring, before growth has commenced. As these roses are hardy, and remain from year to year, they will gradually attain considerable size and the pruning should be done in a way to keep the plant well balanced and in good shape. Liberal manuring and thorough cultivation add much to the beauty and profusion of bloom of these roses.

INSECTS

GUARANTEED REMEDIES

Roses which are strong, and vigorous are not likely to be attacked by insects, or, if attacked, are not easily injured. It is highly important, therefore, to keep your plants healthy and in good growing condition by liberal manuring and thorough cultivation. When insects appear, apply in proper remedies promptly and vigorously, and in bad attacks stir the ground deeply with the hoe and rake every day. A little perseverance to resist the present attack is all that is needed; next year you may not be troubled with insects at all. We find that a strong stream of water from a hose applied once a day, either morning or night, will keep our roses free from insects. Where this is impossible, we would suggest the following remedies, which we will guarantee to keep your roses free of any insects, if properly applied and followed up. It is not an experimental remedy, but one that from many years' experience we find is an absolute insect destroyer. It is very inexpensive and can be procured at any drug store. Remember we guarantee these remedies.

Boil for ten minutes four oz. of quassi chips in a gallon of soft water. Strain off the chips and add four ounces of whale-oil soap, which should be dissolved in it, as it cools. Stir well before using. Apply with a clean painter's brush of moderate or small size, brushing every leaf and shoot that is infested. After fifteen or twenty minutes, the plants should be washed or syringed with pure water. For mildew, sprinkle lightly with flour or Sulphur.

The Rose Bug and other kindred pests are most effectually vanquished by a Kerosene Emulsion, made as follows: Dissolve 1-4 pound Hard Soap in two quarts of boiling water, then add 1 pint Kerosene Oil, and stir violently for some three to five minutes, until the ingredients are thoroughly mixed; then dilute to twice its bulk with water, and apply with a spraying syringe, or sprinkle it on the plants with a small whisk broom, and repeat as often as necessary.

Rose Caterpillar appears in May, or about the time the leaves have pushed forth. It can be readily detected, as it glues a leaf or two together to form its shelter. The bushes should be gone over and the glued leaves pinched between the finger and thumb. This is the only effective remedy.

Saw Fly, larva and other insects later than the caterpillar, may be prevented by an occasional syringing, vigorously applied. When they have appeared a sprinkling of powdered white hellebore over the plants will often destroy and disperse them. The plants should be well moistened before applying the hellebore, so that it will remain.

The Red Spider seldom attacks plants in the open air, but confines itself to plants under glass. It may be kept off by daily syringing the plants with water. When plants are once infested with this insect, the fumes of sulphur will alone destroy it. This causes the foliage to drop off, but is the best remedy.

Mildew is best cured by sulphur and soot. One of these should be applied the moment the disease appears. It is a good plan to previously sprinkle the plants with water, so that the substance applied will adhere.

HYBRID PERPETUAL AND REMONTANT ROSES

Alfred Colomb—Bright carmine-crimson; very large, full, fine globular form.

American Beauty—This variety has been rightly described an ever-blooming hybrid perpetual. Very large, beautiful form and very double; deep pink shaded with carmine. The fragrance is delightful, resembling *La France* or the old fashioned *Damask*.

Anne de Diesbach—Bright rose color; very large and showy; particularly fine in bud; flower slightly cupped. A vigorous grower; one of the best.

Baron de Bonstetten—Flowers large; very double and full; rich dark red, passing to deep velvety maroon; highly scented.

Black Prince—Dark velvety crimson, almost black. A good grower and a most magnificent rose.

Caprice—A strong-growing variety, with petals beautifully striped pink and white; a decided novelty.

Duke of Albany—Dark crimson; very full and large; a free bloomer.

Clio—Large, fine globular form; flesh color, shaded with rosy-pink in the centre. Vigorous growth; handsome foliage. One of the finest.

Earl of Dufferin—Fine velvety crimson, beautifully shaded with dark rich maroon; very large, full and fragrant; hardy and free.

Fisher Holmes—Shaded crimson-scarlet; large, globular with pointed centre; vigorous and free-flowering. Resembles *General Jacqueminot*, but fuller, darker and a more constant bloomer.

Frau Karl Druschki (*Lambert*, 1900)—Very vigorous; snow white petals, shell-shaped; very large; opening well.

General Jacqueminot—Bright, shining crimson, rich and velvety; exceedingly brilliant and handsome; makes magnificent buds, and is highly esteemed as one of the best and most desirable for open ground and forcing.

Helen Gould—Large, beautiful, rosy-crimson, with long pointed buds. It will live through the most severe winters without protection and entirely free from insects. A most constant and profuse bloomer.

Jules Margottin—Bright cherry-red; large, well formed; fragrant flowers.

Louis Van Houtte—Rich crimson, heavily shaded with maroon; a beautifully formed double flower.

Magna Charta—A splendid sort; bright clear pink, flushed with violet-crimson; very sweet; flower extra large; fine form; very double and full; a free bloomer.

Marchioness of Londonderry—A new ivory-white hybrid perpetual; flowers of great size, perfectly formed and borne at the end of the branches, making it very desirable for cutting. One of the finest white roses known.

Margaret Dickson—Hardy, thrifty and a profuse bloomer. Flowers large, pure white. A grand sort.

Marshall P. Wilder—Bright cherry-carmine; very fragrant and one of the finest bloomers.

Mrs. John Laing—This we consider one of the finest roses that has been sent out in years. It is very free-flowering, commencing to bloom early in the season and continues to bloom profusely until late autumn. Color a soft delicate pink, with a satin tinge; very fragrant.

Paul Neyron—Flowers immense; one of the largest roses grown; deep shining rose, fresh and pretty. Strong grower and remarkably free bloomer.

Prince Camille de Rohan—Deep velvety crimson; large; moderately full.

Soleil d'Or, or Golden Sun—This magnificent new rose is perfectly hardy, making plants three feet high; full and globular, measuring three and one-half inches across and delightfully fragrant; color superb, varying from gold and orange-yellow to reddish-gold shaded with nasturtium-red. Buds pointed and beautifully formed. A grand rose, destined to be immensely popular.

Ulrich Brunner—Large, full, with exceedingly large, shell-shaped petals. Cherry. One of the best varieties for forcing and open air culture.

Victor Verdier—Rose with carmine centre; good size; free grower; very beautiful.

AUSTRIAN ROSES

This class flowers on extreme ends of wood of previous season's growth; very little pruning is therefore required.

Harrison's Yellow—Double; bright yellow; very showy and fine.

Persian Yellow—Deep, bright yellow; small but handsome; double; a very early bloomer, and much the finest hardy yellow rose. This does best when budded.

TEA ROSES

Bon Silene—Valuable for summer or winter blooming. Buds of beautiful form; free bloomer; deep rose, shaded with carmine.

Bridesmaid—An exquisite rose both in bud and open flower; bright clear pink, large and very double; stem long and stiff; foliage handsome and glossy. Excellent for summer and winter flowering.

Catharine Mermet—One of the finest roses grown. The buds are very large and globular, petals being recurved and showing no advantage the lovely bright pink of the centre, shading into light creamy pink, like La France in its silvery shading. A strong grower and fine bloomer.

Etirole de Lyon—One of the finest yellow bedding roses, and one of the hardiest in the Tea section. Flower very large and double and deliciously fragrant; chrome yellow, deepening in centre to pure golden yellow.

Papa Gontier—A magnificent red Tea. Strong grower, with fine healthy foliage; buds large and long, with thick, broad petals of dark carmine-crimson, changing to a lighter shade in the open flower. Excellent winter-blooming variety; one of the best for outdoor planting, opening up its flowers beautifully.

Sunset—Saffron and orange ; very double and hands me ; beautiful rich foliage ; one of the best roses of recent introduction ; excellent for forcing.

The Bride—Pure white and large size. Admirable for forcing and summer flowering. The buds have more substance than Niphetos, are full and double and possess the good characteristics of Catharine Mermet.

HYBRID TEA ROSES

A beautiful class of half-hardy roses, combining the free-flowering qualities of the Tea class with the rich coloring and, to some extent, the hardiness of Hybrid Perpetuals. Though not as hardy as the Hybrid Perpetuals, they are much hardier than the Teas, and will stand out during the winter wherever the Bourbon will, and where the Tea would be killed to the ground.

Duchess of Albany, or Red la France—This variety is a sport from La France, deeper in color, more expanded in form and larger in size. Large and full, highly perfumed, and of first quality in every respect. Flowers are produced in extraordinary profusion.

Gruss an Teplitz—Large, rich scarlet, shading to velvety crimson ; fragrant, and flowers in great abundance all summer. Valuable for bedding.

KAISERINE AUGUSTA VICTORIA (*Lambert & Reiter, 1891*)—Beautiful primrose ; excellent variety.

La France—Delicate silvery rose, shaded with cerise pink, often silvery pink with peach shading. Very large, double and superb form. Flowers continuously throughout the season. None can surpass the delicacy of its coloring ; in fragrance, incomparable ; in form perfect. Sweetest and most useful of all roses.

Liberty—A grand new rose, surpassing Meteor in brilliancy and purity of color. A free bloomer and retains its brilliancy of coloring a remarkably long time after being cut. Resembles Jacqueminot in size and fragrance.

Meteor—A rich, dark, velvety crimson, ever-blooming rose, as fine in color as the best of the hybrid perpetuals ; good size, very double, perfect in shape, either as buds or when fully opened ; the plant is vigorous and remarkably free-flowering. A splendid sort for pot culture, and the best of all the hybrid teas as a bedding variety for summer cut flowers, as it retains its color well, even in the hottest weather.

Souv. du President Carrot—Large and full, bud long ; rosy flesh, shaded white at the edges of the petals ; form perfect. Growth vigorous ; very free flowering ; a valuable variety.

Souv. de Wootton—A beautiful shade of rosy-crimson ; delightfully fragrant ; a constant and most prolific bloomer, every new shoot being crowned with one or more buds. One of the most satisfactory roses for either the amateur or commercial florist to grow.

William Francis Bennett—Rich glowing crimson. Very fragrant.

Additional varieties H. T. Roses which are of the best :—

General McArthur—Red.

Chateau de Vouget—Very dark red,

Lyon—Coral red.

Mde. Segond Weber—Flesh pink.

Duchess Wellington—Saffron yellow.

Mrs. Aaron Ward—Coppery orange.

Mrs. Peter Blair—

Jeannette Heller—Creamy white with shades of pink.

Dean Hole—Salmon pink.

Étirole de France—Crimson.

Rhea Reid—Dark red.

Marquise de Sinity—Rich golden yellow.

Molly S. Crawford—Pure white fragrant.

Mrs. Theo. Rossevelt—Creamy white, pink shaded.

Wm. Sheen—Purest pink.

Lady Ashton—Deep rose, shading pink.

La Progress—Golden yellow.

White Lady.

Sunburst—Best yellow.

Gladys Harkness—Salmon pink.

Mad Mouline Soupert.

Mad Caro. Testout—Satiny pink.

Mad Ravary—Rich nankeen yellow.

Merville de Lyon.

HYBRID NOISETTE ROSES

This group is obtained by crossing Noisette with the hardy sorts. They generally flower in clusters and bloom freely throughout the season, and are of about the same hardiness as the Bourbons and Hybrid Teas.

Coquette des Alps—One of the finest pure white hybrid perpetuals ; large, full ; finely formed ; pure white, sometimes faintly tinged with pale blush ; profuse bloomer ; very hardy and beautiful.

Coquette des Blanches (*sometimes called BALL OF SNOW*)—Pure snowy white, sometimes faintly tinged with pale rose ; blooms in large clusters ; medium size ; full ; blooms the first year and all through the season.

Madame Alfred Carrier—Flesh white with salmon yellow at base of petals. One of the best pillar roses.

NOISETTE ROSES

Caroline Marniesse—Pure white ; medium size ; double ; tea fragrance ; a constant bloomer.

Cloth of Gold (*Chronmatella*)—Rich, deep yellow ; large, double, fragrant, and a vigorous grower.

Gloire de Dijon—Noted for its large sized flower, its delicious tea scent, and its exquisite shades of color, being a blending of amber, carmine and cream.

Marechal Niel—A beautiful deep yellow ; large and globular ; fragrant ; free flowering ; one of the finest yellow tea-scented roses ; a good climber.

Solfaterre—Bright sulphur yellow ; large and globular.

CLIMBING ROSES

Baltimore Belle—Pale blush, nearly white ; very double. Flowers in large clusters, the whole plant appearing a perfect mass of bloom.

Crimson Rambler—This is the most decided novelty in roses we have had in years. Introduced from Japan in 1893, it has been a source of wonder and admiration wherever exhibited. The plant is a vigorous grower, making shoots from eight to ten feet long in a season. The flowers are grown in great pyramidal panicles, each carrying thirty to forty blooms ; the individual flowers are one to one and one-half inches in diameter, and remain in perfect condition a long time. Bright, vivid crimson, showing none of the purplish tint as common in crimson roses.

Philadelphia—Blooms in clusters. Flowers two to two and one-half inches across, perfectly double to the centre ; excellent substance and very durable. Color pure deep rich crimson, far brighter and more intense than any other rose of its class. Does not fade or wash out, but holds its bright dazzling color to the last. Has handsome foliage, does not mildew, and is an early and abundant bloomer. Undoubtedly the brightest and best of all hardy crimson climbing roses to date.

Queen of the Prairies—Bright rosy red ; large, compact and globular flowers ; blooms in clusters ; one of the best.

Ramblers—Pink, White and Yellow. These are similar to the Crimson Rambler, except not quite as rampant growers, nor quite as hardy, but make very desirable companions.

Seven Sisters (*Greville*)—Crimson, changing to white.

MOSS ROSES

Blanche Moreau—Pure white, large, full and perfect form ; of one the best.

Crested—Deep pink buds, surrounded with mossy fringe and crest. Very beautiful and fragrant ; growth slender ; does best when budded.

Glory of Mosses—A moderate grower. Flowers very large ; pale rose.

Salet—Light rose ; large, full. The best of the class, blooming at intervals from June until November.

POLYANTHA, OR FAIRY ROSES

Clothilde Soupert (*the new Tea Polyantha*)—This lovely rose comes from the Garden of Luxembourg, France. It belongs to the Polyantha class, but resembles the tea roses so closely that it is called a tea polyantha, and is undoubtedly the finest rose of its class. The flowers are borne in clusters, and are of large size, round flat form, with beautifully imbricated petals; perfectly full and double and deliciously sweet; color beautiful pinkish-amber or pale creamy-yellow, delicately flushed with silvery-rose, sometimes ivory-white, exquisitely tinted with pale salmon, and sometimes both red and white flowers are produced on the same plant. Recommended for bedding in open ground and also for window and house culture; moderately hardy if given a good covering of leaves and litter before winter begins.

Etoile d'Or—This elegant rose is a great acquisition; full, round flowers, perfectly double, borne in large clusters; pale chrome yellow, with rich citron red center; blooms quickly and profusely.

Little Gem—A very charming fairy rose; flowers of perfect form, very double and full; pure creamy-white, sometimes delicately tinged with salmon-rose.

Mignonette—A splendid variety; one of the very best; full regular flowers; perfectly double and deliciously perfumed; color clear pink, passing to white, tinged with pale rose.

RUGOSA ROSES

Alba—A splendid white variety; highly scented.

Carman—A hybrid obtained by crossing the Pink Rugosa with Harrison's Yellow. Flowers the color of Gen. Jacqueminot and bloom in clusters, continuing nearly all summer. A strong grower, handsome foliage; hardy.

Rubra—Bright rosy-crimson; flowers succeeded by red berries; a very handsome shrub.

Madam Georges Bruant—This novel variety is the result of crossing Rosa Rogosa and tea rose Sombreuil. Flowers in clusters, semi-double; buds long and pointed, similar to Niphetos in shape; pure white; remarkably free flowering; hardy where the thermometer does not go below zero.

LORD PENZANCE HYBRID SWEETBRIER ROSES

These hybrids result from a cross between the fragrant Sweetbrier and various old-fashioned roses, and have attracted great attention in England, where they originated. They should be grown in every garden. Their foliage retains all the delicious scent of the Eglantine, and the single and semi-double flowers are produced in wonderful profusion, varying in color from pale yellow and terra-cotta to crimson. These are followed by bright scarlet seed pods, which are very ornamental until quite late in autumn.

WICHURIANA, OR MEMORIAL ROSE

Will creep over the ground like an Ivy, or can be trained up to a post or trellis. Hardy as grass, and will grow in sun or shade, poor ground or rich. Needs no protection, will take care of itself and bloom profusely every season, without attention. The flowers are single and very large, frequently five or six inches around, pure satiny-white, with bright golden centre. They are borne in large clusters, covering the bush with a sheet of snowy blossoms during the early summer months.

HYBRID WICHURIANA ROSES

Pink Roamer—The flowers are single and from two to three inches in diameter ; rich pink, with silver-white centre and orange-red stamens ; exceedingly fragrant and picturesque.

South Orange Perfection—Belongs to the same class as the above ; blooms freely in clusters. Color, rosy-blush, changing to white ; the flowers are perfect rosettes in form.

TREE ROSES

These beautiful novelties are without question the most pleasing and beautiful of anything ever offered in the rose line. There is nothing in the history of horticulture that is more beautiful than the Tree Rose.

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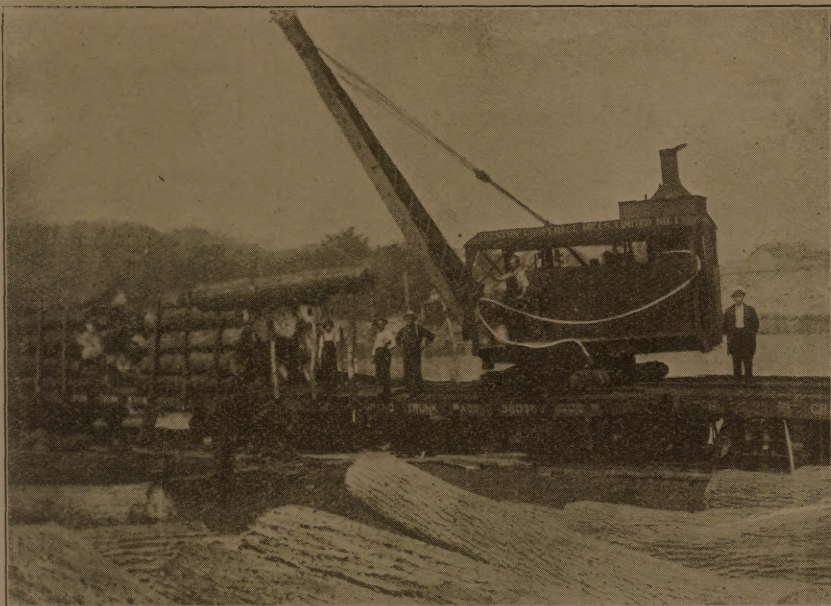
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